



**G E O D E S I G N**  
I N C O R P O R A T E D

GEOTECHNICAL | CONSTRUCTION | ENVIRONMENTAL  
ENGINEERS and SCIENTISTS

July 13, 2015  
File Number 3773-001.01

Andrew Bazinet  
Competitive Power Ventures  
CPV Towantic Energy Center  
50 Braintree Hill Office Park, Suite 300  
Braintree, MA 02184  
E-mail: abazinet@cpv.com

Re: Geotechnical Data Report for Final Design Geotechnical Engineering Services  
CPV Towantic Energy Center  
Oxford, Connecticut

Dear Mr. Bazinet:

Geo**Design**, Inc. (Geo**Design**) is pleased to submit our geotechnical data report for final design site development for the proposed CPV Towantic Energy Center in Oxford, Connecticut. This report presents the results of a geotechnical investigation program carried out by Geo**Design** for the drainage basin areas of the proposed site development.

## **PURPOSE AND SCOPE**

Geo**Design** completed subsurface explorations, groundwater level monitoring and a geotechnical engineering evaluation of drainage basin conditions. Our services included: reviewing of site/project plans and existing geotechnical data, performing subsurface explorations and soil testing, installing four observation wells to monitor groundwater levels, characterizing subsurface conditions within the footprint of the two proposed drainage basins and performing a slope stability analysis of the North Slope.

Our services were provided in accordance with our April 17, 2015 (Revised April 21, 2015) proposal, which was based, in part, on a site visit and our review of a grading plan provided by Civil1 and a preliminary review of a 2001 Geotechnical Investigation Report prepared by Burns and Roe (NJ).

## **BACKGROUND**

### **Site Description**

Refer to Figures 1 and 2 (in Appendix 1) for the site location and site plans. The site is located on the east side of Woodruff Hill Road with a private property (Algonquin Gas Transmission)



bordering the site to the east side. This site is relatively flat in the central portion at Elevations 830 to 840 feet, and slopes gradually to the north to Elevation 860 feet. Elevations included in this report are stated in feet. The site is currently undeveloped and covered with trees.

## **SUBSURFACE EXPLORATIONS**

### **Site Geology**

Published topographic map (*USGS 7.5 Minute Series 1:31,680 scale Naugatuck, CT Quadrangle 1954*), surficial geological map (1:125,000 scale, *Surficial Material Map of Connecticut, Janet Radway Stone, 1992*) and bedrock geologic map (1:125,000 scale, *Bedrock Geological Map of Connecticut, John Rodgers, 1985*) were consulted. The surficial material is mapped as thin deposit of till generally 10 – 15 feet thick, which is described as generally sandy, and commonly stony. The bedrock is mapped as well-layered, gray Granofels of the Taine Mountain Formation around Waterbury dome consisting of equant grains of quartz and feldspar.

### **Test Borings**

A boring location plan is included in Figure 2 in Appendix 1. A GeoDesign representative observed and logged the subsurface exploration that included four borings (DM-1 through DM-4) that were drilled by General Boring, Inc. on April 29, 30 and May 1, 2015. Boring logs are included in Appendix 2.

Borings DM-1 and DM-2 were drilled in the north drainage basin location, and borings DM-3 and DM-4 were drilled in the south drainage basin location. The locations of the borings are based on survey arranged by Civil1, Woodbury, CT.

Hollow stem auger drilling methods were used to advance the borings to depths of approximately 37 to 41 feet below current site grades. Test borings were terminated in natural soils or bedrock. Representative samples were obtained by split barrel sampling procedures in general accordance with ASTM Specification D-1586. The split-barrel sampling procedure utilizes a standard 2-inch O.D. split-barrel sampler that is driven into the bottom of the boring with a 140-pound hammer falling a distance of 30 inches. The number of blows required to advance the sampler the middle 12-inches of a normal 24-inch penetration is recorded as the Standard Penetration Resistance Value (N). The blows are indicated on the boring logs at their depth of occurrence and provide an indication of the relative consistency of the material.

Representative jar soil samples were selected for laboratory washed sieves to confirm visual description and classifications.

Initial groundwater levels were measured using a weighted tape in the open drill holes or inferred from wet soil samples and recorded on the boring logs.



## Groundwater Observation Well & Electronic Monitoring Devices

A groundwater observation well was installed in each borehole (DM-1 through DM-4) to allow measurements of stabilized groundwater levels. The depth of each monitoring well was set based on observed depths to groundwater at each boring. The screened portion of each well was installed approximately 30 to 31 feet below grade. Each well was constructed with a 10-foot long 0.01-inch slotted screen, and solid riser. The screen was surrounded with filter pack sand and sealed at the top with a one foot thick bentonite plug. The remaining annulus was backfilled with auger cuttings to the ground surface. A protective metal cover and concrete collar were installed at the ground surface. Observation well construction is described on the boring logs (Appendix 2). Groundwater level measurements are presented in Tables 1-A through 1-D (Appendix 1).

Level TROLLS Data Loggers (“Trolls”) were installed in two of the monitoring wells (DM-2 and DM-4). Trolls are electronic groundwater monitoring devices that indirectly measure water levels by continuously measuring water pressure and temperature. Trolls were installed on May 13<sup>th</sup>, 2015 (and are still setup to record data at 1-hour intervals) and were deployed near the bottom of each well so that their sensors are submerged.

The data recorded by the Trolls have been downloaded twice to date (for about 39 days). The groundwater level data are summarized in Figures 3 and 4, and Tables 2 and 3 (Appendix 1).

## SUBSURFACE CONDITIONS

### General Subsurface Profile

Soils encountered in the borings were generally consistent with prior borings by others and the referenced published geological information except for the presence of a thicker deposit of till. The generalized subsurface profile, as inferred from the subsurface exploration data, is summarized as follows:

- Topsoil - 2 to 4 inches thick; over
- Glacial Till - 20 to 40+ feet thick
- Bedrock – Bedrock was inferred in Boring DM-1 at approximately 30.5 feet below grade and in Boring DM-2 at approximately 40.5 feet below grade.

The following is a more detailed description of the subsurface materials encountered:

Topsoil: Topsoil was observed at the ground surface at each boring location. The thickness of the topsoil ranged between approximately two and four inches.

Glacial Till: Till was encountered below the topsoil in each borings and typically consisted of very dense to medium dense, brown, fine to coarse sand with varying fractions of fine to coarse gravel, silt and clay. The till thickness was observed to range from approximately 30 and 40+



feet. The representative samples obtained for laboratory washed sieve indicated that the glacial till present at this site consisted of 4 to 24% Gravel, 43 to 50% Sand and, 31 to 52% Silt and Clay.

A detailed description of the soil conditions are presented in the boring logs included in Appendix 2.

### **Groundwater**

The initial depth to groundwater was measured in the borings during drilling or inferred from wet samples. Groundwater was initially measured at a depth of 12.8 to 26.1 feet below existing grades. In dense glacial till, water levels may take some time to stabilize in a borehole and thus, actual depth to water may be shallower or deeper. For this reason, the groundwater level readings taken at end of drilling were deeper than the subsequent well readings (taken on May 13<sup>th</sup>, 26<sup>th</sup> and June 22<sup>nd</sup>, 2015). Tables 1A through 1D present stabilized groundwater readings from May 13<sup>th</sup> to June 21<sup>st</sup>, 2015, and Figures 3 and 4 summarized the stabilized groundwater levels (in wells DM-2 and DM-4) readings from June 1<sup>st</sup> to June 21<sup>st</sup>, 2015. The stabilized groundwater levels vary between depths of 2.4 and 14.8 feet below ground surface corresponding to Elevations 856 and 818.

Based on the foregoing data, the general groundwater flow direction is from north to south, generally corresponding to flow from higher ground surface elevation to lower elevation.

Groundwater levels will vary depending on factors such as temperature, season, precipitation, construction activity, and other conditions, which may be different from those at the time of our measurements.

### **HYDRAULIC CONDUCTIVITY TESTING**

On May 13<sup>th</sup>, 2015, Geo**Design** performed two falling head hydraulic conductivity (a.k.a. slug/permeability) tests with the purpose of estimating hydraulic conductivity (permeability) values of the glacial till stratum. The falling head test consists of introducing water to, artificially and temporarily, cause a sudden change in head (water level) and measuring the water level response with time until it stabilizes. During the beginning of the test, trolls were setup to measure water level changes at very shorts intervals (seconds) and later, the length of time between measurements was increased gradually up to one hour intervals. The trolls were placed at depth within the 10-foot screen zone with a minimum clearance of one foot above the bottom of each well.

In borings DM-2 and DM-4, the estimated hydraulic conductivity values were  $1.03 \times 10^{-5}$  ft/day and  $7.18 \times 10^{-4}$  ft/day, respectively. These values are within the typical range for dense glacial till in this locale.



Values of permeabilities were calculated from test data in units of feet per day (ft/day) assuming the conditions of an open borehole and screened well. The falling head (slug) test was performed in general accordance with ASTM D4044 – 96 *Standard Test Method (Field Procedure) for Instantaneous Change in Head (Slug) Tests for Determining Hydraulic Properties of Aquifers*. Interpretation of the falling head test data was performed in general accordance with the Bouwer & Rice method.

## SOILS LABORATORY TESTING

Laboratory sieve testing was performed on representative glacial till samples within the well screen location obtained from the borings. These tests were performed by *GeoTesting Express* in Acton, Massachusetts. The laboratory test results are included in Appendix 3. Gradations which indicate a fines content (finer than the #200 sieve) of approximately 31 to 53 percent are consistent with the estimated permeability of the tested soils

## SLOPE STABILITY ANALYSIS

Based on the test boring data and existing and proposed site topography (by Civil1), a representative slope profile was constructed. The plan location of the profile is depicted on Figure 2, and the profile is include as Section A-a' on Figure 5. The proposed cut, 3H (horizontal) to 1V (vertical) will extend below the existing groundwater levels in very dense glacial till soils. The soils are expected slowly drain during excavation and a seepage pattern will develop with discharge to the basins.

A slope stability analysis was performed to determine the stability of the proposed cut slope. The slope was analyzed for stability assuming circular shear failure using the computer program "SLIDE" (version 5.0) using the Simplified Bishop, Spencer and GLE/Morgenstern-Price methods. The short-term (during construction) and long-term (after construction) conditions for this slope were determined to have a minimum Factor of Safety of 1.3.

## DISCUSSION AND CONCLUSIONS

1. Site soils consist of a thick layer of glacial till as demonstrated by testing in the basins and review of prior borings.
2. Site soils have low permeability.
3. Bottom of basins will be below groundwater levels.
4. Stormwater basins will be below seasonal high groundwater and will intercept water from the excavated geometry and will contribute some flow to the basins.
5. Due to the low permeability of site soils, we anticipate that the rate of groundwater flow into the basins will be relatively low; loss of stormwater due to infiltration will be minimized.
6. The North Slope will be cut at a 3H to 1V slope partially below the groundwater levels.



7. An approximated vegetated 3H:1V cut slope is anticipated to be stable, however it must be monitored during construction to allow evaluation of the need for underdrains and/or a filter blanket below the vegetated surface.

## LIMITATIONS

This report is subject to the limitations included in Appendix 4.

Thank you for the opportunity to be of service. Please feel free to call if you have questions.

Sincerely,

Hasian Zapata  
Field Engineer

Ulrich LaFosse, P.E.  
Senior Principal/Reviewer

Theodore von Rosenvinge, IV, P.E.  
Senior Principal

Attachments: Appendix 1 – Figures and Tables  
Appendix 2 – Boring Logs  
Appendix 3 – Laboratory Test Results  
Appendix 4 – Limitations



**CPV Towantic Energy Center  
Oxford, Connecticut  
File No. 3773-001.01 – July 13, 2015  
Page No. 7**

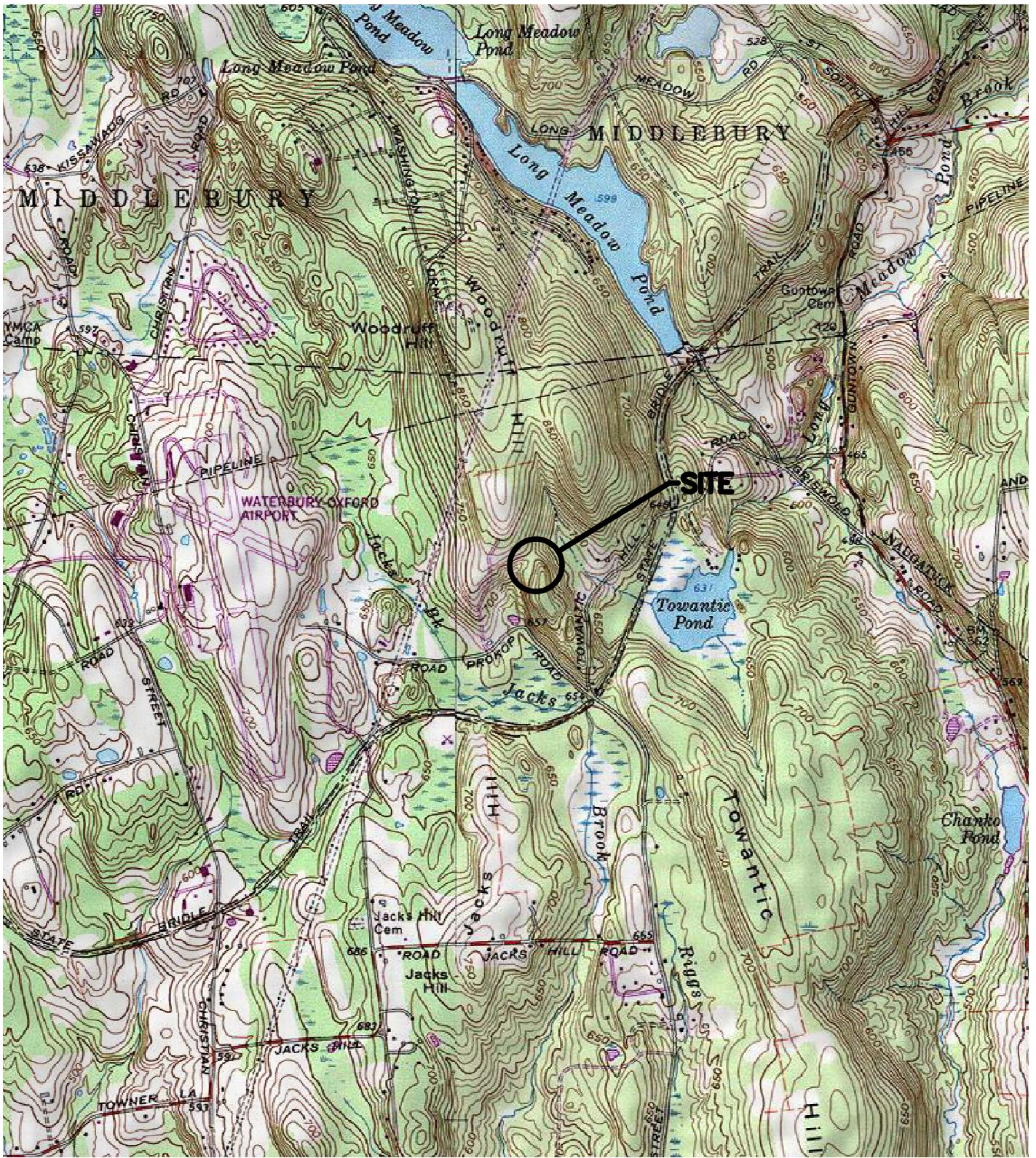
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# Appendix 1

## Figures

- **Figure 1.** Site Location Plan
- **Figure 2.** Boring Location Plan
- **Figure 3.** Groundwater Level Vs. Time Well DM-2
- **Figure 4.** Groundwater Level Vs. Time Well DM-4
- **Figure 5.** Section Profile A-A'
- **Figure 6.** Well DM-2 Falling Head (Permeability/Slug) Test Data
- **Figure 7.** Well DM-4 Falling Head (Permeability/Slug) Test Data
- **Table 1A – 1D.** Groundwater Level Data (DM-1 to DM-4)
- **Table 2.** Well DM-2 Data
- **Table 3.** Well DM-4 Data





M:\CL\3773\CADD\TOPO-FIGURE 1.dwg Jesse McIntyre 6/25/2015 10:52 AM GEO Standard Pen Table.ctb



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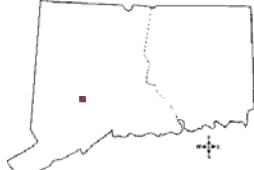
DRAWN BY:

DBP

REVIEWED BY:

HRZ

CONNECTICUT

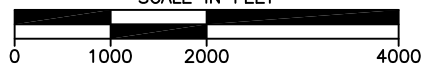


QUADRANGLE LOCATION

## CPV TOWANTIC ENERGY CENTER OXFORD, CONNECTICUT

REFERENCE:  
U.S.G.S. 7.5 MINUTE QUADRANGLE: NAUGATUCK, CONNECTICUT.  
FIGURE WAS CREATED USING TOPO! 2003 SOFTWARE.

SCALE IN FEET



PROJECT NO.

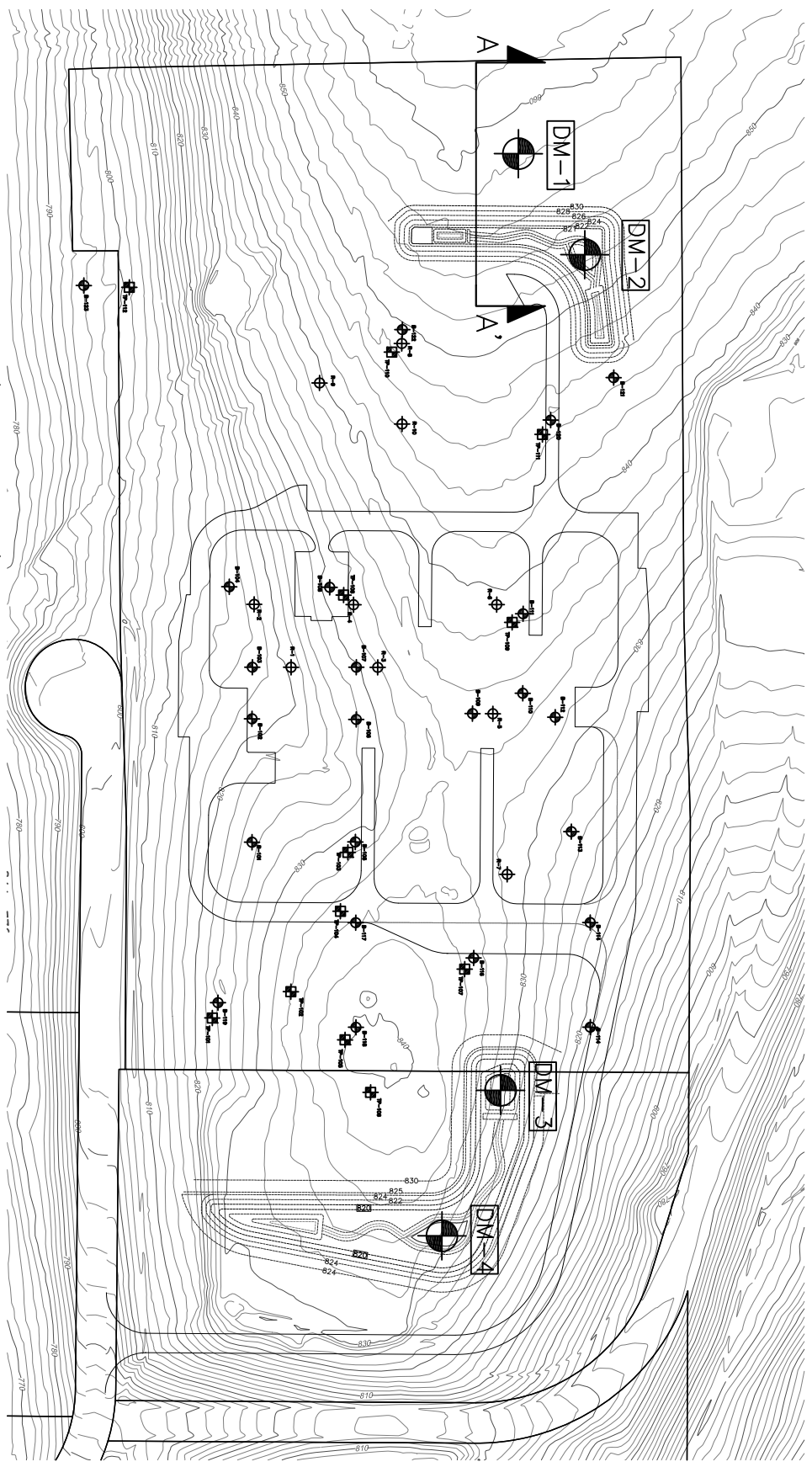
3773-001.01

DATE





6/25/2015

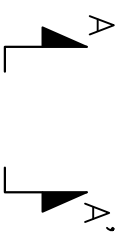
FIGURE NO.

1



### LEGEND

-  TEST BORING NO. AND LOCATION BY GEODESIGN, INC.
-  TEST PIT LOCATION & NUMBER
-  PREVIOUSLY PERFORMED TEST BORINGS
-  PREVIOUSLY PERFORMED RESISTIVITY TEST



PROFILE A-A' (SEE FIGURE 5 FOR SECTION PROFILE)

- NOTES:**
1. BASE MAP DEVELOPED FROM AN ELECTRONIC FILE PROVIDED BY CIVIL 1 ENTITLED "98132 TP & BORING V10" DATED 2001. ORIGINAL SCALE 1:20.
  2. BORINGS WERE PERFORMED BY GENERAL BORINGS, INC. AND OBSERVED AND LOGGED BY GEODESIGN PERSONNEL.
  3. THE LOCATIONS OF THE BORINGS WERE BASED ON SURVEY ARRANGED BY CIVIL 1. THIS DESIGN SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.



DESIGN BY: DRAWN BY:	HRZ BAC	CHECKED BY: APPROVED BY:	HRZ TVR
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**GEODESIGN**  
INCORPORATED

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PROJECT CPV TOWANTIC ENERGY OXFORD, CONNECTICUT	PROJECT NO. 3773-001.01
DWG. TITLE BORING LOCATION PLAN	DATE 6/29/2015
	DRAWING NO. 2

Figure 3  
Groundwater Level Vs. Time  
CPV Towantic Energy Center  
Oxford, CT

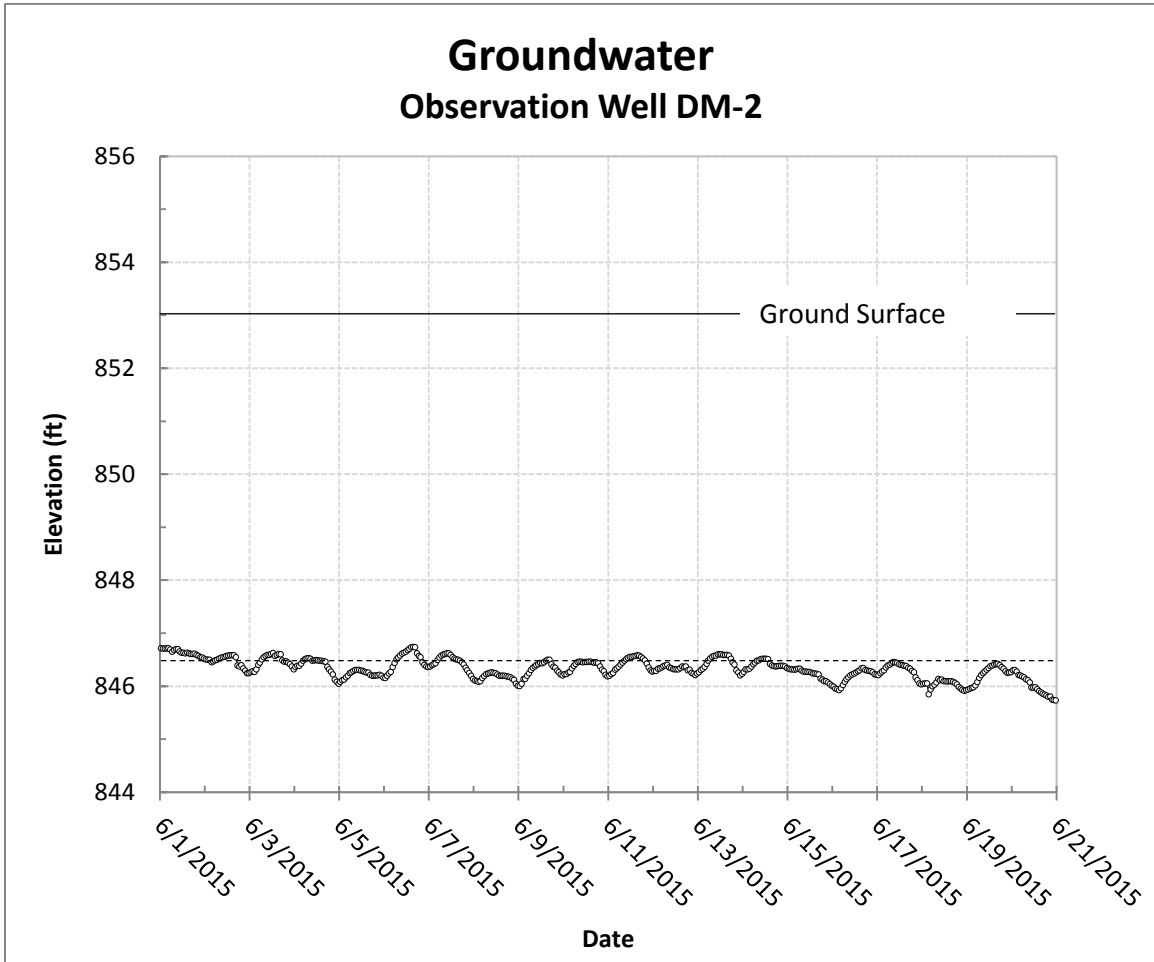
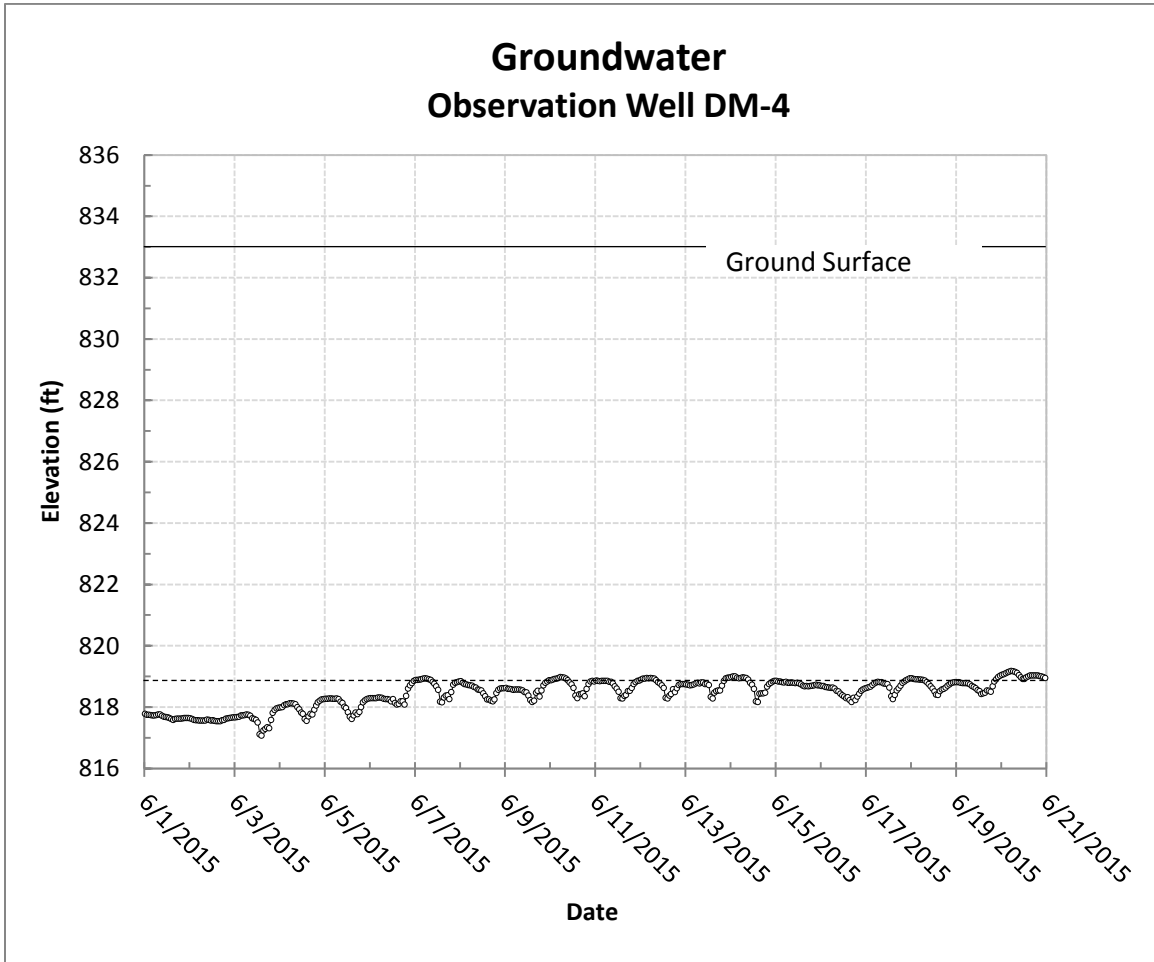
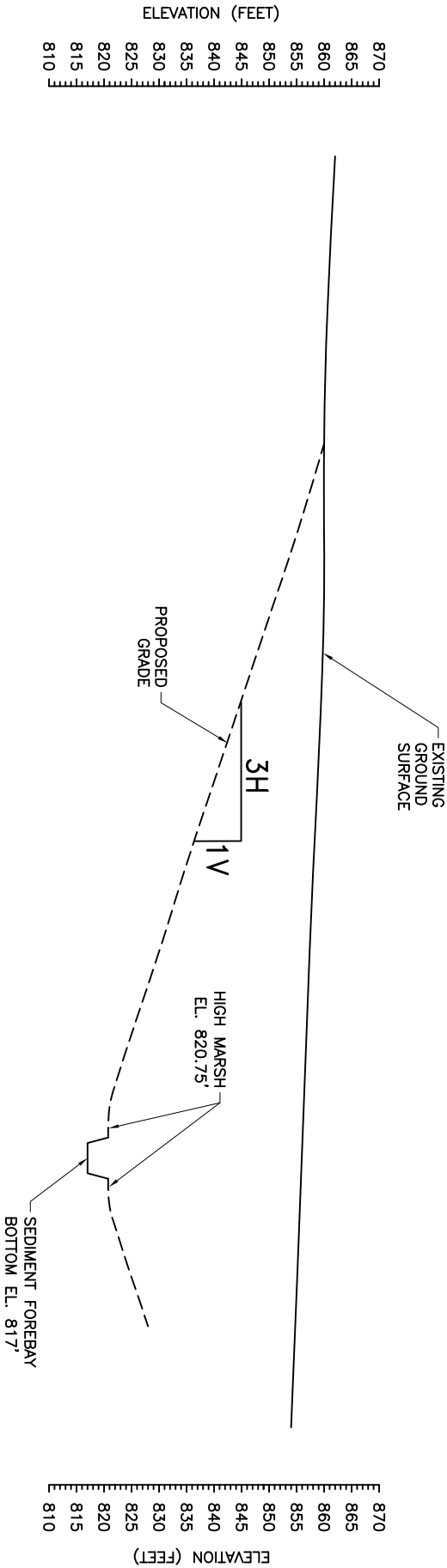


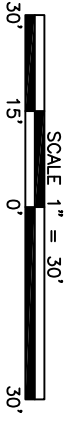
Figure 4  
Groundwater Level Vs. Time  
CPV Towantic Energy Center  
Oxford, CT





NOTE: SEE FIGURE 2 FOR PLAN LOCATION OF PROFILE A-A'

DESIGN BY: DRAWN BY:	HRZ BAC	CHECKED BY: APPROVED BY:	HRZ TVR
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PROJECT CPV TOWANTIC ENERGY OXFORD, CONNECTICUT
DWG. TITLE SECTION PROFILE A-A'

PROJECT NO. 3773-001.01
DATE 6/29/2015
DRAWING NO. 5

Figure 6  
DM-2 Falling Head Test Results  
CPV Towantic Energy Center  
Oxford, CT

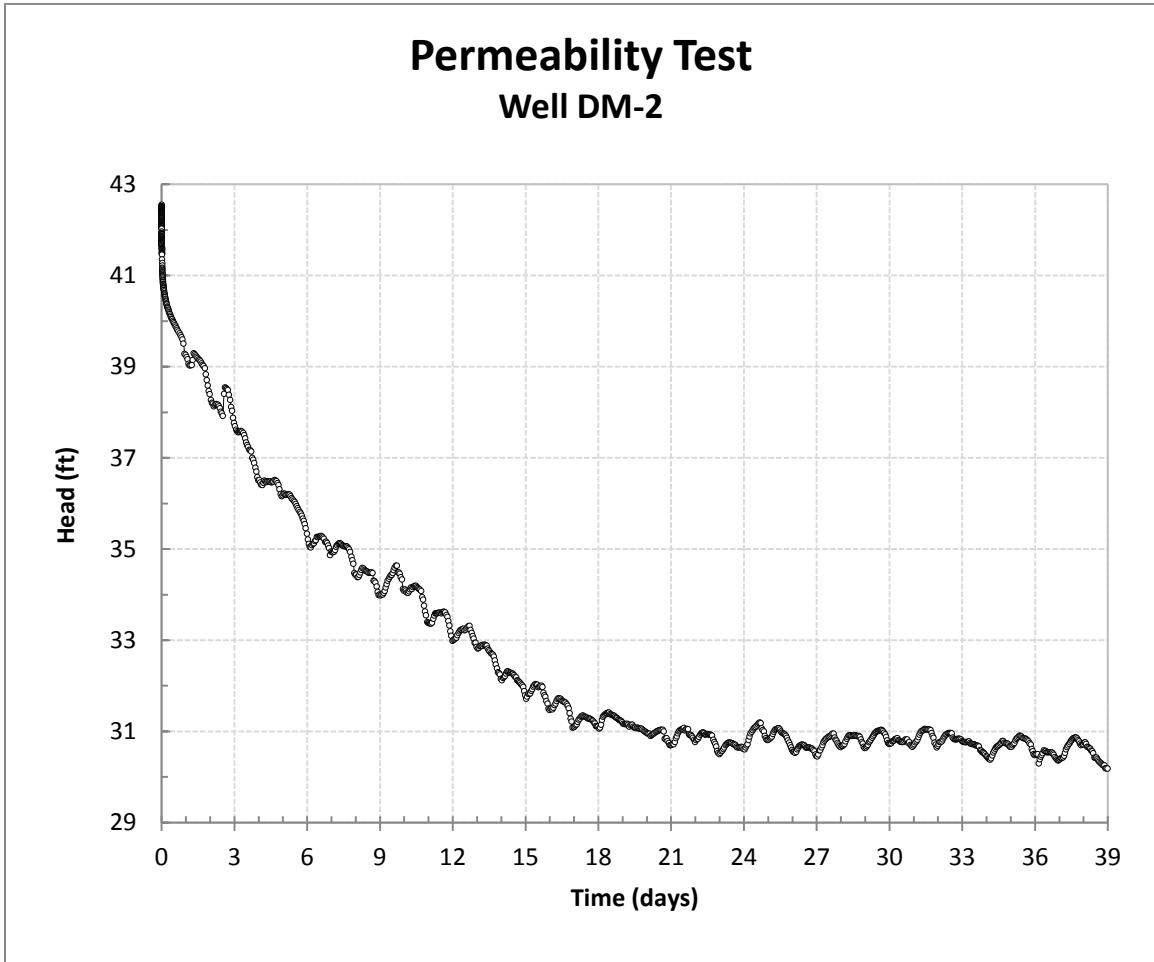
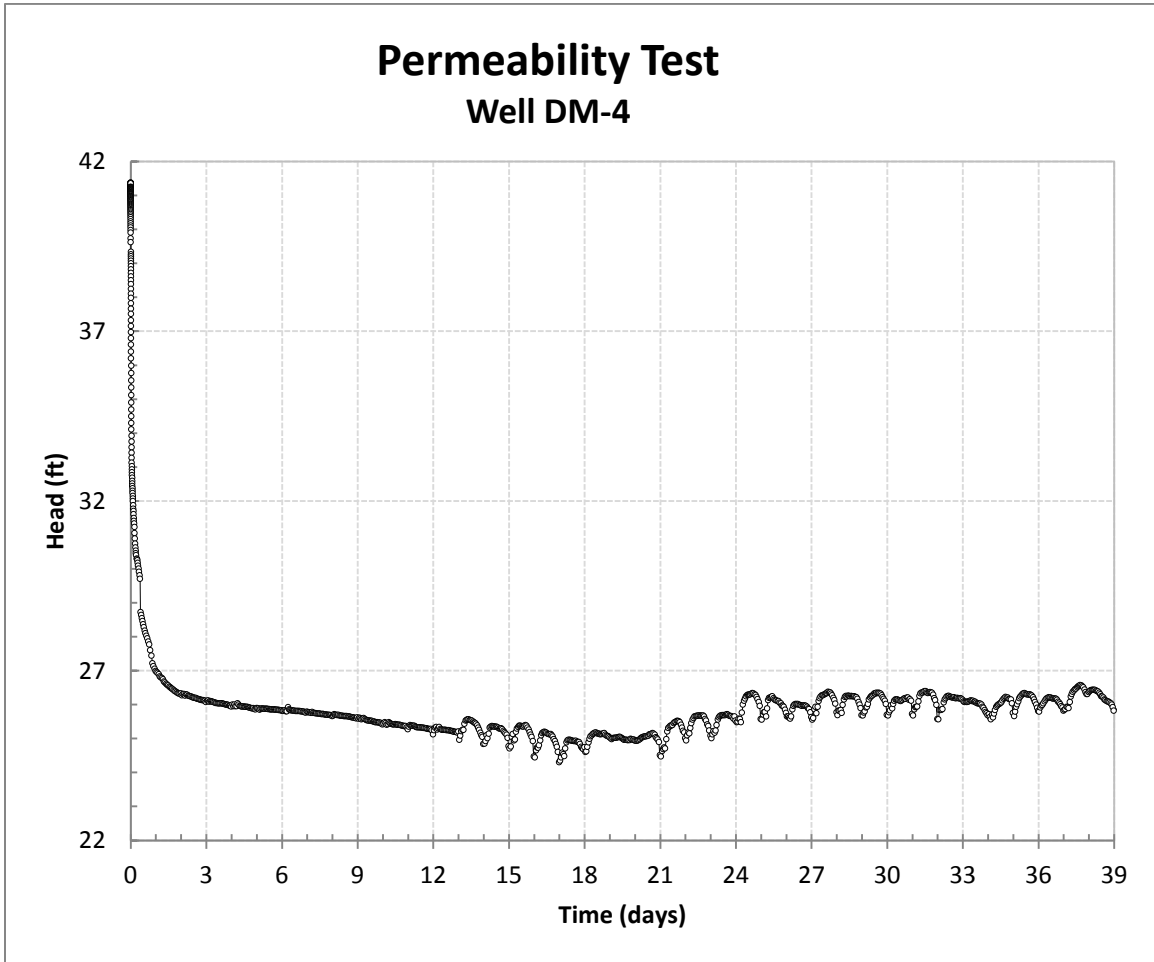


Figure 7  
DM-4 Falling Head Test Results  
CPV Towantic Energy Center  
Oxford, CT



**Table 1A.** Groundwater Level Data - Observation Well DM-1.

<b>Well DM-1</b>		
<b>Ground Surface Elevation (ft)</b>		858.3
<b>Readings:</b>		
<b>Date</b>	<b>Elevation (ft)</b>	<b>Depth (ft)</b>
May 1, 2015*	845.5	12.8
May 13, 2015**	855.9	2.4
May 26, 2015	854.7	3.6
June 22, 2015***	855.8	2.5

**Table 1B.** Groundwater Level Data - Observation Well DM-2.

<b>Well DM-2</b>		
<b>Ground Surface Elevation (ft)</b>		852.3
<b>Readings:</b>		
<b>Date</b>	<b>Elevation (ft)</b>	<b>Depth (ft)</b>
May 1, 2015*	836.3	16.0
May 13, 2015**	847.9	4.4
May 26, 2015	846.7	5.6
June 22, 2015	846.5	5.8

**Table 1C.** Groundwater Level Data - Observation Well DM-3.

<b>Well DM-3</b>		
<b>Ground Surface Elevation (ft)</b>		832.5
<b>Readings:</b>		
<b>Date</b>	<b>Elevation (ft)</b>	<b>Depth (ft)</b>
May 1, 2015*	814	18.5
May 13, 2015**	821.8	10.7
May 26, 2015	820.7	11.8
June 22, 2015	822.2	10.3

**Table 1D.** Groundwater Level Data - Observation Well DM-4.

<b>Well DM-4</b>		
<b>Ground Surface Elevation (ft)</b>		833
<b>Readings:</b>		
<b>Date</b>	<b>Elevation (ft)</b>	<b>Depth (ft)</b>
May 1, 2015*	806.9	26.1
May 13, 2015**	819.7	13.3
May 26, 2015	818.2	14.8
June 22, 2015	818.9	14.1

**NOTE:** \*At end of drilling

\*\*Prior to introducing water to the borehole for permeability test.



**Table 2.** Well DM-2 Data

Date and Time	Elapsed Time (mins)	Pressure (psi)	Temperature (°C)	Depth (ft)	Elevation (ft)
5/13/2015 14:37	0.0	18.425	13.235	42.54	852.28
5/13/2015 14:37	0.0042	18.432	13.25	42.56	852.30
5/13/2015 14:37	0.0085	18.415	13.259	42.52	852.26
5/13/2015 14:37	0.0125	18.413	13.268	42.52	852.25
5/13/2015 14:37	0.0167	18.416	13.27	42.52	852.26
5/13/2015 14:37	0.0209	18.414	13.272	42.52	852.25
5/13/2015 14:37	0.0250	18.411	13.272	42.51	852.25
5/13/2015 14:37	0.0292	18.409	13.272	42.51	852.24
5/13/2015 14:37	0.0334	18.411	13.27	42.51	852.25
5/13/2015 14:37	0.0375	18.408	13.271	42.50	852.24
5/13/2015 14:37	0.0417	18.406	13.267	42.50	852.24
5/13/2015 14:37	0.0459	18.402	13.264	42.49	852.23
5/13/2015 14:37	0.0500	18.396	13.268	42.48	852.21
5/13/2015 14:37	0.0542	18.399	13.262	42.48	852.22
5/13/2015 14:37	0.0584	18.397	13.261	42.48	852.22
5/13/2015 14:37	0.0625	18.395	13.259	42.47	852.21
5/13/2015 14:37	0.0667	18.393	13.256	42.47	852.21
5/13/2015 14:37	0.0709	18.39	13.254	42.46	852.20
5/13/2015 14:37	0.0750	18.389	13.25	42.46	852.20
5/13/2015 14:37	0.0792	18.387	13.247	42.46	852.19
5/13/2015 14:37	0.0834	18.385	13.244	42.45	852.19
5/13/2015 14:37	0.0875	18.382	13.241	42.44	852.18
5/13/2015 14:37	0.0917	18.381	13.242	42.44	852.18
5/13/2015 14:37	0.0959	18.38	13.237	42.44	852.18
5/13/2015 14:37	0.100	18.376	13.235	42.43	852.17
5/13/2015 14:37	0.106	18.378	13.216	42.44	852.17
5/13/2015 14:37	0.112	18.371	13.206	42.42	852.16
5/13/2015 14:37	0.119	18.37	13.194	42.42	852.15
5/13/2015 14:37	0.126	18.366	13.187	42.41	852.14
5/13/2015 14:37	0.133	18.363	13.179	42.40	852.14
5/13/2015 14:37	0.141	18.361	13.165	42.40	852.13
5/13/2015 14:37	0.150	18.36	13.152	42.39	852.13
5/13/2015 14:37	0.158	18.355	13.144	42.38	852.12
5/13/2015 14:37	0.168	18.351	13.132	42.37	852.11
5/13/2015 14:37	0.178	18.35	13.122	42.37	852.11
5/13/2015 14:37	0.188	18.346	13.115	42.36	852.10
5/13/2015 14:37	0.199	18.342	13.1	42.35	852.09
5/13/2015 14:37	0.211	18.338	13.086	42.34	852.08

5/13/2015 14:37	0.224	18.335	13.071	42.34	852.07
5/13/2015 14:37	0.237	18.329	13.06	42.32	852.06
5/13/2015 14:37	0.251	18.325	13.045	42.31	852.05
5/13/2015 14:37	0.266	18.32	13.028	42.30	852.04
5/13/2015 14:37	0.282	18.316	13.015	42.29	852.03
5/13/2015 14:37	0.298	18.312	13	42.28	852.02
5/13/2015 14:37	0.316	18.309	12.982	42.28	852.01
5/13/2015 14:37	0.335	18.303	12.963	42.26	852.00
5/13/2015 14:37	0.355	18.3	12.945	42.25	851.99
5/13/2015 14:37	0.376	18.296	12.928	42.25	851.98
5/13/2015 14:37	0.398	18.29	12.912	42.23	851.97
5/13/2015 14:38	0.422	18.283	12.887	42.21	851.95
5/13/2015 14:38	0.447	18.28	12.864	42.21	851.95
5/13/2015 14:38	0.473	18.273	12.844	42.19	851.93
5/13/2015 14:38	0.501	18.274	12.819	42.19	851.93
5/13/2015 14:38	0.531	18.27	12.793	42.19	851.92
5/13/2015 14:38	0.562	18.267	12.769	42.18	851.92
5/13/2015 14:38	0.596	18.258	12.741	42.16	851.90
5/13/2015 14:38	0.631	18.256	12.713	42.15	851.89
5/13/2015 14:38	0.668	18.253	12.683	42.15	851.88
5/13/2015 14:38	0.708	18.25	12.654	42.14	851.88
5/13/2015 14:38	0.750	18.25	12.621	42.14	851.88
5/13/2015 14:38	0.794	18.242	12.587	42.12	851.86
5/13/2015 14:38	0.841	18.238	12.555	42.11	851.85
5/13/2015 14:38	0.891	18.238	12.517	42.11	851.85
5/13/2015 14:38	0.944	18.232	12.479	42.10	851.83
5/13/2015 14:38	1.00	18.227	12.442	42.09	851.82
5/13/2015 14:38	1.06	18.227	12.402	42.09	851.82
5/13/2015 14:38	1.12	18.22	12.36	42.07	851.81
5/13/2015 14:38	1.19	18.216	12.313	42.06	851.80
5/13/2015 14:38	1.26	18.21	12.27	42.05	851.78
5/13/2015 14:38	1.33	18.209	12.228	42.04	851.78
5/13/2015 14:38	1.41	18.204	12.179	42.03	851.77
5/13/2015 14:39	1.50	18.174	12.126	41.96	851.70
5/13/2015 14:39	1.58	18.174	12.08	41.96	851.70
5/13/2015 14:39	1.68	18.09	12.023	41.77	851.51
5/13/2015 14:39	1.78	18.084	11.966	41.76	851.49
5/13/2015 14:39	1.88	18.136	11.915	41.88	851.61
5/13/2015 14:39	1.99	18.162	11.856	41.94	851.67
5/13/2015 14:39	2.11	18.16	11.802	41.93	851.67
5/13/2015 14:39	2.24	18.162	11.74	41.93	851.67

5/13/2015 14:39	2.37	18.158	11.686	41.93	851.66
5/13/2015 14:40	2.51	18.153	11.627	41.91	851.65
5/13/2015 14:40	2.66	18.149	11.568	41.91	851.64
5/13/2015 14:40	2.82	18.144	11.507	41.90	851.63
5/13/2015 14:40	2.98	18.132	11.45	41.87	851.60
5/13/2015 14:40	3.16	18.127	11.39	41.85	851.59
5/13/2015 14:40	3.35	18.121	11.328	41.84	851.58
5/13/2015 14:41	3.55	18.114	11.269	41.83	851.56
5/13/2015 14:41	3.76	18.107	11.211	41.81	851.55
5/13/2015 14:41	3.98	18.107	11.153	41.81	851.55
5/13/2015 14:41	4.22	18.099	11.091	41.79	851.53
5/13/2015 14:42	4.47	18.093	11.034	41.78	851.51
5/13/2015 14:42	4.73	18.088	10.979	41.76	851.50
5/13/2015 14:42	5.01	18.082	10.925	41.75	851.49
5/13/2015 14:42	5.31	18.079	10.872	41.75	851.48
5/13/2015 14:43	5.62	18.076	10.822	41.74	851.47
5/13/2015 14:43	5.96	18.068	10.771	41.72	851.46
5/13/2015 14:43	6.31	18.064	10.722	41.71	851.45
5/13/2015 14:44	6.68	18.06	10.675	41.70	851.44
5/13/2015 14:44	7.08	18.058	10.632	41.70	851.43
5/13/2015 14:45	7.50	18.058	10.593	41.70	851.43
5/13/2015 14:45	7.94	18.05	10.554	41.68	851.41
5/13/2015 14:45	8.41	18.058	10.517	41.69	851.43
5/13/2015 14:46	8.91	18.066	10.483	41.71	851.45
5/13/2015 14:47	9.44	18.064	10.448	41.71	851.45
5/13/2015 14:47	10.0	18.061	10.422	41.70	851.44
5/13/2015 14:48	10.6	18.054	10.393	41.69	851.42
5/13/2015 14:48	11.2	18.05	10.368	41.68	851.41
5/13/2015 14:49	11.9	18.043	10.342	41.66	851.40
5/13/2015 14:50	12.6	18.041	10.322	41.66	851.39
5/13/2015 14:50	13.3	18.035	10.305	41.64	851.38
5/13/2015 14:51	14.1	18.026	10.286	41.62	851.36
5/13/2015 14:52	15.0	18.019	10.266	41.61	851.34
5/13/2015 14:53	15.8	18.014	10.252	41.59	851.33
5/13/2015 14:54	16.8	18.013	10.237	41.59	851.33
5/13/2015 14:55	17.8	18.01	10.223	41.58	851.32
5/13/2015 14:56	18.8	18.001	10.215	41.57	851.30
5/13/2015 14:57	19.9	17.997	10.201	41.56	851.29
5/13/2015 14:58	21.1	17.991	10.191	41.54	851.28
5/13/2015 14:59	22.4	17.98	10.182	41.52	851.25
5/13/2015 15:01	23.7	17.976	10.174	41.51	851.24

5/13/2015 15:02	25.1	17.971	10.167	41.49	851.23
5/13/2015 15:04	26.6	17.967	10.157	41.49	851.22
5/13/2015 15:05	28.2	17.961	10.151	41.47	851.21
5/13/2015 15:07	29.8	17.956	10.143	41.46	851.20
5/13/2015 15:09	31.6	17.911	10.136	41.36	851.09
5/13/2015 15:11	33.5	17.878	10.131	41.28	851.02
5/13/2015 15:13	35.5	17.853	10.122	41.22	850.96
5/13/2015 15:15	37.6	17.833	10.117	41.18	850.91
5/13/2015 15:17	39.8	17.822	10.11	41.15	850.89
5/13/2015 15:19	42.2	17.81	10.106	41.12	850.86
5/13/2015 15:22	44.7	17.8	10.104	41.10	850.84
5/13/2015 15:24	47.3	17.788	10.096	41.07	850.81
5/13/2015 15:27	50.1	17.779	10.093	41.05	850.79
5/13/2015 15:30	53.1	17.773	10.089	41.04	850.77
5/13/2015 15:33	56.2	17.761	10.086	41.01	850.75
5/13/2015 15:37	59.6	17.753	10.083	40.99	850.73
5/13/2015 15:40	63.1	17.742	10.081	40.97	850.70
5/13/2015 15:44	66.8	17.73	10.077	40.94	850.67
5/13/2015 15:48	70.8	17.718	10.073	40.91	850.65
5/13/2015 15:52	75.0	17.711	10.07	40.90	850.63
5/13/2015 15:56	79.4	17.698	10.065	40.87	850.60
5/13/2015 16:01	84.1	17.695	10.067	40.86	850.59
5/13/2015 16:06	89.1	17.681	10.064	40.83	850.56
5/13/2015 16:11	94.4	17.676	10.06	40.81	850.55
5/13/2015 16:17	100.0	17.667	10.059	40.79	850.53
5/13/2015 16:23	106.0	17.655	10.061	40.77	850.50
5/13/2015 16:29	112.0	17.651	10.058	40.76	850.49
5/13/2015 16:36	119.0	17.639	10.056	40.73	850.47
5/13/2015 16:43	126.0	17.634	10.056	40.72	850.45
5/13/2015 16:50	133.0	17.623	10.057	40.69	850.43
5/13/2015 16:58	141.0	17.618	10.055	40.68	850.42
5/13/2015 17:07	150.0	17.605	10.052	40.65	850.39
5/13/2015 17:15	158.0	17.593	10.054	40.62	850.36
5/13/2015 17:25	168.0	17.584	10.056	40.60	850.34
5/13/2015 17:35	178.0	17.577	10.053	40.59	850.32
5/13/2015 17:45	188.0	17.567	10.049	40.56	850.30
5/13/2015 17:56	199.0	17.555	10.053	40.53	850.27
5/13/2015 18:08	211.0	17.553	10.053	40.53	850.27
5/13/2015 18:21	224.0	17.538	10.053	40.49	850.23
5/13/2015 18:34	237.0	17.532	10.049	40.48	850.22
5/13/2015 18:48	251.0	17.52	10.051	40.45	850.19

5/13/2015 19:03	266.0	17.51	10.052	40.43	850.17
5/13/2015 19:19	282.0	17.496	10.051	40.40	850.13
5/13/2015 19:35	298.0	17.488	10.051	40.38	850.12
5/13/2015 19:53	316.0	17.481	10.051	40.36	850.10
5/13/2015 20:12	335.0	17.465	10.053	40.33	850.06
5/13/2015 20:32	355.0	17.455	10.055	40.30	850.04
5/13/2015 20:53	376.0	17.449	10.05	40.29	850.03
5/13/2015 21:15	398.0	17.434	10.05	40.25	849.99
5/13/2015 21:39	422.0	17.426	10.051	40.24	849.97
5/13/2015 22:04	447.0	17.409	10.051	40.20	849.94
5/13/2015 22:30	473.0	17.397	10.052	40.17	849.91
5/13/2015 22:58	501.0	17.39	10.051	40.15	849.89
5/13/2015 23:28	531.0	17.377	10.049	40.12	849.86
5/13/2015 23:59	562.0	17.365	10.051	40.10	849.83
5/14/2015 0:33	596.0	17.349	10.051	40.06	849.80
5/14/2015 1:08	631.0	17.342	10.051	40.04	849.78
5/14/2015 1:45	668.0	17.328	10.05	40.01	849.75
5/14/2015 2:25	708.0	17.314	10.05	39.98	849.72
5/14/2015 3:07	750.0	17.302	10.049	39.95	849.69
5/14/2015 3:51	794.0	17.286	10.051	39.91	849.65
5/14/2015 4:38	841.0	17.272	10.049	39.88	849.62
5/14/2015 5:28	891.0	17.257	10.051	39.85	849.58
5/14/2015 6:21	944.0	17.241	10.051	39.81	849.55
5/14/2015 7:17	1000.0	17.227	10.049	39.78	849.51
5/14/2015 8:17	1060.0	17.208	10.05	39.73	849.47
5/14/2015 9:17	1120.0	17.192	10.049	39.70	849.43
5/14/2015 10:17	1180.0	17.173	10.05	39.65	849.39
5/14/2015 11:17	1240.0	17.152	10.049	39.60	849.34
5/14/2015 12:17	1300.0	17.112	10.049	39.51	849.25
5/14/2015 13:17	1360.0	17.015	10.051	39.29	849.03
5/14/2015 14:17	1420.0	17.005	10.051	39.27	849.00
5/14/2015 15:17	1480.0	16.985	10.049	39.22	848.95
5/14/2015 16:17	1540.0	16.962	10.049	39.17	848.90
5/14/2015 17:17	1600.0	16.92	10.049	39.07	848.80
5/14/2015 18:17	1660.0	16.904	10.05	39.03	848.77
5/14/2015 19:17	1720.0	16.904	10.048	39.03	848.77
5/14/2015 20:17	1780.0	16.908	10.047	39.04	848.78
5/14/2015 21:17	1840.0	16.956	10.049	39.15	848.89
5/14/2015 22:17	1900.0	17.022	10.047	39.30	849.04
5/14/2015 23:17	1960.0	17.011	10.047	39.28	849.02
5/15/2015 0:17	2020.0	16.998	10.047	39.25	848.99

5/15/2015 1:17	2080.0	16.987	10.048	39.22	848.96
5/15/2015 2:17	2140.0	16.974	10.048	39.19	848.93
5/15/2015 3:17	2200.0	16.964	10.049	39.17	848.91
5/15/2015 4:17	2260.0	16.953	10.046	39.14	848.88
5/15/2015 5:17	2320.0	16.942	10.045	39.12	848.86
5/15/2015 6:17	2380.0	16.922	10.043	39.07	848.81
5/15/2015 7:17	2440.0	16.909	10.046	39.04	848.78
5/15/2015 8:17	2500.0	16.9	10.044	39.02	848.76
5/15/2015 9:17	2560.0	16.878	10.047	38.97	848.71
5/15/2015 10:17	2620.0	16.82	10.048	38.84	848.57
5/15/2015 11:17	2680.0	16.764	10.045	38.71	848.44
5/15/2015 12:17	2740.0	16.714	10.044	38.59	848.33
5/15/2015 13:17	2800.0	16.661	10.043	38.47	848.21
5/15/2015 14:17	2860.0	16.633	10.045	38.40	848.14
5/15/2015 15:17	2920.0	16.577	10.042	38.28	848.01
5/15/2015 16:17	2980.0	16.549	10.043	38.21	847.95
5/15/2015 17:17	3040.0	16.539	10.045	38.19	847.92
5/15/2015 18:17	3100.0	16.514	10.046	38.13	847.87
5/15/2015 19:17	3160.0	16.528	10.042	38.16	847.90
5/15/2015 20:17	3220.0	16.537	10.042	38.18	847.92
5/15/2015 21:17	3280.0	16.538	10.043	38.19	847.92
5/15/2015 22:17	3340.0	16.53	10.041	38.17	847.91
5/15/2015 23:17	3400.0	16.516	10.045	38.13	847.87
5/16/2015 0:17	3460.0	16.496	10.043	38.09	847.83
5/16/2015 1:17	3520.0	16.465	10.042	38.02	847.76
5/16/2015 2:17	3580.0	16.448	10.042	37.98	847.71
5/16/2015 3:17	3640.0	16.425	10.042	37.93	847.66
5/16/2015 4:17	3700.0	16.634	10.041	38.41	848.15
5/16/2015 5:17	3760.0	16.693	10.04	38.55	848.28
5/16/2015 6:17	3820.0	16.689	10.042	38.53	848.27
5/16/2015 7:17	3880.0	16.681	10.042	38.52	848.25
5/16/2015 8:17	3940.0	16.671	10.04	38.49	848.23
5/16/2015 9:17	4000.0	16.626	10.042	38.39	848.13
5/16/2015 10:17	4060.0	16.578	10.038	38.28	848.02
5/16/2015 11:17	4120.0	16.51	10.041	38.12	847.86
5/16/2015 12:17	4180.0	16.474	10.041	38.04	847.77
5/16/2015 13:17	4240.0	16.406	10.041	37.88	847.62
5/16/2015 14:17	4300.0	16.356	10.042	37.77	847.50
5/16/2015 15:17	4360.0	16.327	10.041	37.70	847.44
5/16/2015 16:17	4420.0	16.294	10.039	37.62	847.36
5/16/2015 17:17	4480.0	16.28	10.04	37.59	847.33

5/16/2015 18:17	4540.0	16.269	10.04	37.56	847.30
5/16/2015 19:17	4600.0	16.272	10.04	37.57	847.31
5/16/2015 20:17	4660.0	16.273	10.039	37.57	847.31
5/16/2015 21:17	4720.0	16.283	10.039	37.60	847.33
5/16/2015 22:17	4780.0	16.275	10.036	37.58	847.32
5/16/2015 23:17	4840.0	16.263	10.04	37.55	847.29
5/17/2015 0:17	4900.0	16.242	10.037	37.50	847.24
5/17/2015 1:17	4960.0	16.21	10.037	37.43	847.17
5/17/2015 2:17	5020.0	16.172	10.036	37.34	847.08
5/17/2015 3:17	5080.0	16.148	10.037	37.29	847.02
5/17/2015 4:17	5140.0	16.131	10.037	37.25	846.98
5/17/2015 5:17	5200.0	16.102	10.037	37.18	846.92
5/17/2015 6:17	5260.0	16.095	10.036	37.16	846.90
5/17/2015 7:17	5320.0	16.087	10.038	37.15	846.88
5/17/2015 8:17	5380.0	16.027	10.037	37.01	846.74
5/17/2015 9:17	5440.0	16.008	10.036	36.96	846.70
5/17/2015 10:17	5500.0	15.979	10.035	36.90	846.63
5/17/2015 11:17	5560.0	15.931	10.034	36.78	846.52
5/17/2015 12:17	5620.0	15.895	10.037	36.70	846.44
5/17/2015 13:17	5680.0	15.845	10.035	36.59	846.32
5/17/2015 14:17	5740.0	15.814	10.034	36.52	846.25
5/17/2015 15:17	5800.0	15.817	10.034	36.52	846.26
5/17/2015 16:17	5860.0	15.793	10.034	36.47	846.20
5/17/2015 17:17	5920.0	15.772	10.033	36.42	846.16
5/17/2015 18:17	5980.0	15.768	10.035	36.41	846.15
5/17/2015 19:17	6040.0	15.79	10.032	36.46	846.20
5/17/2015 20:17	6100.0	15.81	10.034	36.51	846.24
5/17/2015 21:17	6160.0	15.802	10.034	36.49	846.22
5/17/2015 22:17	6220.0	15.795	10.032	36.47	846.21
5/17/2015 23:17	6280.0	15.804	10.032	36.49	846.23
5/18/2015 0:17	6340.0	15.804	10.033	36.49	846.23
5/18/2015 1:17	6400.0	15.801	10.031	36.48	846.22
5/18/2015 2:17	6460.0	15.8	10.032	36.48	846.22
5/18/2015 3:17	6520.0	15.792	10.03	36.46	846.20
5/18/2015 4:17	6580.0	15.797	10.029	36.48	846.21
5/18/2015 5:17	6640.0	15.803	10.03	36.49	846.23
5/18/2015 6:17	6700.0	15.816	10.027	36.52	846.26
5/18/2015 7:17	6760.0	15.811	10.022	36.51	846.24
5/18/2015 8:17	6820.0	15.804	10.027	36.49	846.23
5/18/2015 9:17	6880.0	15.785	10.026	36.45	846.18
5/18/2015 10:17	6940.0	15.767	10.026	36.41	846.14

5/18/2015 11:17	7000.0	15.728	10.025	36.32	846.05
5/18/2015 12:17	7060.0	15.683	10.027	36.21	845.95
5/18/2015 13:17	7120.0	15.662	10.025	36.16	845.90
5/18/2015 14:17	7180.0	15.672	10.026	36.19	845.92
5/18/2015 15:17	7240.0	15.685	10.024	36.22	845.95
5/18/2015 16:17	7300.0	15.686	10.023	36.22	845.96
5/18/2015 17:17	7360.0	15.675	10.025	36.19	845.93
5/18/2015 18:17	7420.0	15.678	10.024	36.20	845.94
5/18/2015 19:17	7480.0	15.681	10.024	36.21	845.94
5/18/2015 20:17	7540.0	15.681	10.026	36.21	845.94
5/18/2015 21:17	7600.0	15.676	10.024	36.20	845.93
5/18/2015 22:17	7660.0	15.661	10.024	36.16	845.90
5/18/2015 23:17	7720.0	15.644	10.025	36.12	845.86
5/19/2015 0:17	7780.0	15.631	10.021	36.09	845.83
5/19/2015 1:17	7840.0	15.618	10.024	36.06	845.80
5/19/2015 2:17	7900.0	15.608	10.02	36.04	845.78
5/19/2015 3:17	7960.0	15.589	10.018	35.99	845.73
5/19/2015 4:17	8020.0	15.568	10.023	35.95	845.68
5/19/2015 5:17	8080.0	15.548	10.022	35.90	845.64
5/19/2015 6:17	8140.0	15.532	10.023	35.86	845.60
5/19/2015 7:17	8200.0	15.512	10.026	35.82	845.55
5/19/2015 8:17	8260.0	15.497	10.022	35.78	845.52
5/19/2015 9:17	8320.0	15.475	10.024	35.73	845.47
5/19/2015 10:17	8380.0	15.45	10.021	35.67	845.41
5/19/2015 11:17	8440.0	15.427	10.021	35.62	845.36
5/19/2015 12:17	8500.0	15.395	10.021	35.55	845.29
5/19/2015 13:17	8560.0	15.356	10.021	35.46	845.19
5/19/2015 14:17	8620.0	15.306	10.024	35.34	845.08
5/19/2015 15:17	8680.0	15.25	10.021	35.21	844.95
5/19/2015 16:17	8740.0	15.208	10.019	35.11	844.85
5/19/2015 17:17	8800.0	15.18	10.018	35.05	844.79
5/19/2015 18:17	8860.0	15.177	10.02	35.04	844.78
5/19/2015 19:17	8920.0	15.197	10.02	35.09	844.83
5/19/2015 20:17	8980.0	15.208	10.019	35.11	844.85
5/19/2015 21:17	9040.0	15.214	10.015	35.13	844.87
5/19/2015 22:17	9100.0	15.235	10.019	35.18	844.91
5/19/2015 23:17	9160.0	15.246	10.014	35.20	844.94
5/20/2015 0:17	9220.0	15.277	10.014	35.27	845.01
5/20/2015 1:17	9280.0	15.272	10.017	35.26	845.00
5/20/2015 2:17	9340.0	15.279	10.018	35.28	845.02
5/20/2015 3:17	9400.0	15.278	10.018	35.28	845.01



5/20/2015 4:17	9460.0	15.285	10.018	35.29	845.03
5/20/2015 5:17	9520.0	15.279	10.014	35.28	845.02
5/20/2015 6:17	9580.0	15.268	10.017	35.25	844.99
5/20/2015 7:17	9640.0	15.258	10.017	35.23	844.97
5/20/2015 8:17	9700.0	15.227	10.01	35.16	844.90
5/20/2015 9:17	9760.0	15.23	10.011	35.17	844.90
5/20/2015 10:17	9820.0	15.217	10.011	35.14	844.87
5/20/2015 11:17	9880.0	15.193	10.014	35.08	844.82
5/20/2015 12:17	9940.0	15.169	10.013	35.03	844.76
5/20/2015 13:17	10000.0	15.102	10.015	34.87	844.61
5/20/2015 14:17	10060.0	15.135	10.013	34.95	844.68
5/20/2015 15:17	10120.0	15.13	10.011	34.93	844.67
5/20/2015 16:17	10180.0	15.131	10.014	34.94	844.67
5/20/2015 17:17	10240.0	15.136	10.01	34.95	844.69
5/20/2015 18:17	10300.0	15.15	10.009	34.98	844.72
5/20/2015 19:17	10360.0	15.18	10.008	35.05	844.79
5/20/2015 20:17	10420.0	15.197	10.008	35.09	844.83
5/20/2015 21:17	10480.0	15.208	10.004	35.12	844.85
5/20/2015 22:17	10540.0	15.215	10.01	35.13	844.87
5/20/2015 23:17	10600.0	15.214	10.011	35.13	844.87
5/21/2015 0:17	10660.0	15.209	10.011	35.12	844.85
5/21/2015 1:17	10720.0	15.197	10.01	35.09	844.83
5/21/2015 2:17	10780.0	15.192	10.006	35.08	844.81
5/21/2015 3:17	10840.0	15.188	10.01	35.07	844.81
5/21/2015 4:17	10900.0	15.184	10.006	35.06	844.80
5/21/2015 5:17	10960.0	15.186	10.01	35.06	844.80
5/21/2015 6:17	11020.0	15.181	10.009	35.05	844.79
5/21/2015 7:17	11080.0	15.17	10.008	35.03	844.77
5/21/2015 8:17	11140.0	15.157	10.007	35.00	844.74
5/21/2015 9:17	11200.0	15.131	10.011	34.94	844.68
5/21/2015 10:17	11260.0	15.086	10.008	34.83	844.57
5/21/2015 11:17	11320.0	15.053	10.008	34.76	844.49
5/21/2015 12:17	11380.0	15.02	10.012	34.68	844.42
5/21/2015 13:17	11440.0	14.931	10.012	34.48	844.21
5/21/2015 14:17	11500.0	14.917	10.01	34.44	844.18
5/21/2015 15:17	11560.0	14.916	10.011	34.44	844.18
5/21/2015 16:17	11620.0	14.891	10.007	34.38	844.12
5/21/2015 17:17	11680.0	14.894	10.007	34.39	844.13
5/21/2015 18:17	11740.0	14.912	10.008	34.43	844.17
5/21/2015 19:17	11800.0	14.937	10.008	34.49	844.23
5/21/2015 20:17	11860.0	14.964	10.007	34.55	844.29

5/21/2015 21:17	11920.0	14.979	10.008	34.59	844.32
5/21/2015 22:17	11980.0	14.973	10.009	34.57	844.31
5/21/2015 23:17	12040.0	14.963	10.008	34.55	844.29
5/22/2015 0:17	12100.0	14.953	10.009	34.53	844.26
5/22/2015 1:17	12160.0	14.949	10.008	34.52	844.25
5/22/2015 2:17	12220.0	14.945	10.01	34.51	844.24
5/22/2015 3:17	12280.0	14.936	10.01	34.49	844.22
5/22/2015 4:17	12340.0	14.935	10.01	34.48	844.22
5/22/2015 5:17	12400.0	14.936	10.008	34.49	844.22
5/22/2015 6:17	12460.0	14.937	10.006	34.49	844.23
5/22/2015 7:17	12520.0	14.931	10.009	34.48	844.21
5/22/2015 8:17	12580.0	14.86	10.011	34.31	844.05
5/22/2015 9:17	12640.0	14.855	10.007	34.30	844.04
5/22/2015 10:17	12700.0	14.839	10.01	34.26	844.00
5/22/2015 11:17	12760.0	14.805	10.007	34.18	843.92
5/22/2015 12:17	12820.0	14.752	10.007	34.06	843.80
5/22/2015 13:17	12880.0	14.722	10.006	33.99	843.73
5/22/2015 14:17	12940.0	14.729	10.009	34.01	843.75
5/22/2015 15:17	13000.0	14.721	10.007	33.99	843.73
5/22/2015 16:17	13060.0	14.729	10.007	34.01	843.75
5/22/2015 17:17	13120.0	14.728	10.007	34.01	843.74
5/22/2015 18:17	13180.0	14.743	10.005	34.04	843.78
5/22/2015 19:17	13240.0	14.761	10.01	34.08	843.82
5/22/2015 20:17	13300.0	14.794	10.006	34.16	843.90
5/22/2015 21:17	13360.0	14.827	10.003	34.24	843.97
5/22/2015 22:17	13420.0	14.858	10.006	34.31	844.04
5/22/2015 23:17	13480.0	14.877	10.006	34.35	844.09
5/23/2015 0:17	13540.0	14.895	10.007	34.39	844.13
5/23/2015 1:17	13600.0	14.909	10.005	34.43	844.16
5/23/2015 2:17	13660.0	14.913	10.007	34.43	844.17
5/23/2015 3:17	13720.0	14.932	10.005	34.48	844.21
5/23/2015 4:17	13780.0	14.959	10.006	34.54	844.28
5/23/2015 5:17	13840.0	14.983	10.005	34.60	844.33
5/23/2015 6:17	13900.0	15.002	10.005	34.64	844.38
5/23/2015 7:17	13960.0	15.001	10.006	34.64	844.38
5/23/2015 8:17	14020.0	14.939	10.004	34.49	844.23
5/23/2015 9:17	14080.0	14.939	10.006	34.49	844.23
5/23/2015 10:17	14140.0	14.925	10.004	34.46	844.20
5/23/2015 11:17	14200.0	14.892	10.005	34.39	844.12
5/23/2015 12:17	14260.0	14.871	10.004	34.34	844.07
5/23/2015 13:17	14320.0	14.779	10.003	34.12	843.86

5/23/2015 14:17	14380.0	14.765	10.002	34.09	843.83
5/23/2015 15:17	14440.0	14.777	10.001	34.12	843.86
5/23/2015 16:17	14500.0	14.764	10.001	34.09	843.83
5/23/2015 17:17	14560.0	14.747	10.004	34.05	843.79
5/23/2015 18:17	14620.0	14.743	10.004	34.04	843.78
5/23/2015 19:17	14680.0	14.759	10.003	34.08	843.81
5/23/2015 20:17	14740.0	14.777	10	34.12	843.86
5/23/2015 21:17	14800.0	14.794	10.002	34.16	843.90
5/23/2015 22:17	14860.0	14.781	10.002	34.13	843.87
5/23/2015 23:17	14920.0	14.798	10.002	34.17	843.91
5/24/2015 0:17	14980.0	14.807	10.002	34.19	843.93
5/24/2015 1:17	15040.0	14.81	10.002	34.20	843.93
5/24/2015 2:17	15100.0	14.812	10.002	34.20	843.94
5/24/2015 3:17	15160.0	14.798	10.003	34.17	843.90
5/24/2015 4:17	15220.0	14.788	10.001	34.15	843.88
5/24/2015 5:17	15280.0	14.781	10.002	34.13	843.87
5/24/2015 6:17	15340.0	14.775	10.002	34.11	843.85
5/24/2015 7:17	15400.0	14.762	10.001	34.08	843.82
5/24/2015 8:17	15460.0	14.703	10	33.95	843.69
5/24/2015 9:17	15520.0	14.681	10	33.90	843.64
5/24/2015 10:17	15580.0	14.62	9.999	33.76	843.50
5/24/2015 11:17	15640.0	14.566	9.999	33.63	843.37
5/24/2015 12:17	15700.0	14.53	9.998	33.55	843.29
5/24/2015 13:17	15760.0	14.467	9.999	33.40	843.14
5/24/2015 14:17	15820.0	14.456	9.997	33.38	843.12
5/24/2015 15:17	15880.0	14.458	9.997	33.38	843.12
5/24/2015 16:17	15940.0	14.45	9.997	33.37	843.10
5/24/2015 17:17	16000.0	14.451	9.999	33.37	843.10
5/24/2015 18:17	16060.0	14.462	10.001	33.39	843.13
5/24/2015 19:17	16120.0	14.498	9.998	33.48	843.21
5/24/2015 20:17	16180.0	14.528	9.995	33.54	843.28
5/24/2015 21:17	16240.0	14.548	9.997	33.59	843.33
5/24/2015 22:17	16300.0	14.547	9.992	33.59	843.33
5/24/2015 23:17	16360.0	14.55	9.998	33.60	843.33
5/25/2015 0:17	16420.0	14.554	9.996	33.60	843.34
5/25/2015 1:17	16480.0	14.553	9.997	33.60	843.34
5/25/2015 2:17	16540.0	14.554	9.996	33.61	843.34
5/25/2015 3:17	16600.0	14.549	9.993	33.59	843.33
5/25/2015 4:17	16660.0	14.558	9.994	33.62	843.35
5/25/2015 5:17	16720.0	14.564	9.992	33.63	843.36
5/25/2015 6:17	16780.0	14.565	9.992	33.63	843.37

5/25/2015 7:17	16840.0	14.559	9.99	33.62	843.35
5/25/2015 8:17	16900.0	14.534	9.988	33.56	843.30
5/25/2015 9:17	16960.0	14.517	9.989	33.52	843.26
5/25/2015 10:17	17020.0	14.475	9.987	33.42	843.16
5/25/2015 11:17	17080.0	14.434	9.988	33.33	843.06
5/25/2015 12:17	17140.0	14.379	9.988	33.20	842.94
5/25/2015 13:17	17200.0	14.338	9.987	33.11	842.84
5/25/2015 14:17	17260.0	14.287	9.986	32.99	842.73
5/25/2015 15:17	17320.0	14.297	9.988	33.01	842.75
5/25/2015 16:17	17380.0	14.302	9.991	33.02	842.76
5/25/2015 17:17	17440.0	14.31	9.988	33.04	842.78
5/25/2015 18:17	17500.0	14.318	9.988	33.06	842.80
5/25/2015 19:17	17560.0	14.342	9.984	33.11	842.85
5/25/2015 20:17	17620.0	14.363	9.99	33.16	842.90
5/25/2015 21:17	17680.0	14.38	9.99	33.20	842.94
5/25/2015 22:17	17740.0	14.39	9.988	33.23	842.96
5/25/2015 23:17	17800.0	14.391	9.986	33.23	842.97
5/26/2015 0:17	17860.0	14.399	9.98	33.25	842.98
5/26/2015 1:17	17920.0	14.404	9.98	33.26	843.00
5/26/2015 2:17	17980.0	14.387	9.982	33.22	842.96
5/26/2015 3:17	18040.0	14.392	9.984	33.23	842.97
5/26/2015 4:17	18100.0	14.405	9.983	33.26	843.00
5/26/2015 5:17	18160.0	14.418	9.984	33.29	843.03
5/26/2015 6:17	18220.0	14.428	9.979	33.31	843.05
5/26/2015 7:17	18280.0	14.431	9.98	33.32	843.06
5/26/2015 8:17	18340.0	14.392	9.98	33.23	842.97
5/26/2015 9:17	18400.0	14.364	9.983	33.17	842.90
5/26/2015 10:17	18460.0	14.333	9.984	33.10	842.83
5/26/2015 11:17	18520.0	14.309	9.983	33.04	842.78
5/26/2015 12:17	18580.0	14.27	9.985	32.95	842.69
5/26/2015 13:17	18640.0	15.052	9.979	34.75	846.30
5/26/2015 14:17	18700.0	15.011	9.983	34.66	846.20
5/26/2015 15:17	18760.0	14.997	9.982	34.63	846.17
5/26/2015 16:17	18820.0	15.002	9.985	34.64	846.18
5/26/2015 17:17	18880.0	15.019	9.983	34.68	846.22
5/26/2015 18:17	18940.0	15.022	9.98	34.69	846.23
5/26/2015 19:17	19000.0	15.029	9.983	34.70	846.24
5/26/2015 20:17	19060.0	15.022	9.98	34.69	846.23
5/26/2015 21:17	19120.0	15.032	9.982	34.71	846.25
5/26/2015 22:17	19180.0	15.034	9.982	34.71	846.26
5/26/2015 23:17	19240.0	15.028	9.982	34.70	846.24

5/27/2015 0:17	19300.0	15.025	9.981	34.69	846.23
5/27/2015 1:17	19360.0	14.998	9.982	34.63	846.17
5/27/2015 2:17	19420.0	14.982	9.984	34.59	846.14
5/27/2015 3:17	19480.0	14.97	9.982	34.57	846.11
5/27/2015 4:17	19540.0	14.956	9.981	34.53	846.08
5/27/2015 5:17	19600.0	14.946	9.98	34.51	846.05
5/27/2015 6:17	19660.0	14.938	9.98	34.49	846.04
5/27/2015 7:17	19720.0	14.919	9.979	34.45	845.99
5/27/2015 8:17	19780.0	14.885	9.98	34.37	845.91
5/27/2015 9:17	19840.0	14.846	9.98	34.28	845.82
5/27/2015 10:17	19900.0	14.809	9.979	34.19	845.74
5/27/2015 11:17	19960.0	14.77	9.98	34.10	845.65
5/27/2015 12:17	20020.0	14.763	9.974	34.09	845.63
5/27/2015 13:17	20080.0	14.751	9.975	34.06	845.60
5/27/2015 14:17	20140.0	14.707	9.974	33.96	845.50
5/27/2015 15:17	20200.0	14.695	9.977	33.93	845.47
5/27/2015 16:17	20260.0	14.716	9.979	33.98	845.52
5/27/2015 17:17	20320.0	14.725	9.981	34.00	845.54
5/27/2015 18:17	20380.0	14.734	9.979	34.02	845.56
5/27/2015 19:17	20440.0	14.758	9.979	34.08	845.62
5/27/2015 20:17	20500.0	14.777	9.98	34.12	845.66
5/27/2015 21:17	20560.0	14.78	9.98	34.13	845.67
5/27/2015 22:17	20620.0	14.772	9.977	34.11	845.65
5/27/2015 23:17	20680.0	14.767	9.974	34.10	845.64
5/28/2015 0:17	20740.0	14.767	9.979	34.10	845.64
5/28/2015 1:17	20800.0	14.758	9.976	34.08	845.62
5/28/2015 2:17	20860.0	14.756	9.976	34.07	845.61
5/28/2015 3:17	20920.0	14.744	9.978	34.04	845.59
5/28/2015 4:17	20980.0	14.729	9.978	34.01	845.55
5/28/2015 5:17	21040.0	14.724	9.973	34.00	845.54
5/28/2015 6:17	21100.0	14.696	9.972	33.93	845.48
5/28/2015 7:17	21160.0	14.69	9.974	33.92	845.46
5/28/2015 8:17	21220.0	14.679	9.973	33.89	845.44
5/28/2015 9:17	21280.0	14.672	9.974	33.88	845.42
5/28/2015 10:17	21340.0	14.655	9.973	33.84	845.38
5/28/2015 11:17	21400.0	14.648	9.972	33.82	845.36
5/28/2015 12:17	21460.0	14.632	9.972	33.79	845.33
5/28/2015 13:17	21520.0	14.592	9.977	33.69	845.24
5/28/2015 14:17	21580.0	14.552	9.972	33.60	845.14
5/28/2015 15:17	21640.0	14.52	9.972	33.53	845.07
5/28/2015 16:17	21700.0	14.54	9.975	33.57	845.12

5/28/2015 17:17	21760.0	14.567	9.973	33.64	845.18
5/28/2015 18:17	21820.0	14.566	9.971	33.63	845.17
5/28/2015 19:17	21880.0	14.571	9.97	33.64	845.19
5/28/2015 20:17	21940.0	14.594	9.968	33.70	845.24
5/28/2015 21:17	22000.0	14.612	9.972	33.74	845.28
5/28/2015 22:17	22060.0	14.635	9.969	33.79	845.34
5/28/2015 23:17	22120.0	14.648	9.964	33.82	845.37
5/29/2015 0:17	22180.0	14.659	9.966	33.85	845.39
5/29/2015 1:17	22240.0	14.654	9.97	33.84	845.38
5/29/2015 2:17	22300.0	14.653	9.971	33.83	845.38
5/29/2015 3:17	22360.0	14.628	9.974	33.78	845.32
5/29/2015 4:17	22420.0	14.634	9.972	33.79	845.33
5/29/2015 5:17	22480.0	14.641	9.975	33.81	845.35
5/29/2015 6:17	22540.0	14.646	9.975	33.82	845.36
5/29/2015 7:17	22600.0	14.634	9.976	33.79	845.33
5/29/2015 8:17	22660.0	14.577	9.976	33.66	845.20
5/29/2015 9:17	22720.0	14.553	9.977	33.60	845.15
5/29/2015 10:17	22780.0	14.536	9.978	33.56	845.11
5/29/2015 11:17	22840.0	14.499	9.976	33.48	845.02
5/29/2015 12:17	22900.0	14.474	9.974	33.42	844.96
5/29/2015 13:17	22960.0	14.426	9.973	33.31	844.85
5/29/2015 14:17	23020.0	14.413	9.977	33.28	844.82
5/29/2015 15:17	23080.0	14.427	9.974	33.31	844.85
5/29/2015 16:17	23140.0	14.43	9.975	33.32	844.86
5/29/2015 17:17	23200.0	14.418	9.974	33.29	844.83
5/29/2015 18:17	23260.0	14.433	9.973	33.33	844.87
5/29/2015 19:17	23320.0	14.457	9.977	33.38	844.92
5/29/2015 20:17	23380.0	14.473	9.976	33.42	844.96
5/29/2015 21:17	23440.0	14.498	9.973	33.48	845.02
5/29/2015 22:17	23500.0	14.517	9.975	33.52	845.06
5/29/2015 23:17	23560.0	14.527	9.973	33.54	845.09
5/30/2015 0:17	23620.0	14.524	9.972	33.53	845.08
5/30/2015 1:17	23680.0	14.519	9.97	33.52	845.07
5/30/2015 2:17	23740.0	14.503	9.97	33.49	845.03
5/30/2015 3:17	23800.0	14.497	9.972	33.47	845.02
5/30/2015 4:17	23860.0	14.494	9.971	33.47	845.01
5/30/2015 5:17	23920.0	14.49	9.969	33.46	845.00
5/30/2015 6:17	23980.0	14.482	9.969	33.44	844.98
5/30/2015 7:17	24040.0	14.468	9.967	33.41	844.95
5/30/2015 8:17	24100.0	14.451	9.965	33.37	844.91
5/30/2015 9:17	24160.0	14.427	9.96	33.31	844.86

5/30/2015 10:17	24220.0	14.382	9.966	33.21	844.75
5/30/2015 11:17	24280.0	14.331	9.965	33.09	844.63
5/30/2015 12:17	24340.0	14.305	9.965	33.03	844.57
5/30/2015 13:17	24400.0	14.247	9.965	32.90	844.44
5/30/2015 14:17	24460.0	14.25	9.965	32.90	844.45
5/30/2015 15:17	24520.0	14.258	9.965	32.92	844.46
5/30/2015 16:17	24580.0	14.269	9.969	32.95	844.49
5/30/2015 17:17	24640.0	14.278	9.965	32.97	844.51
5/30/2015 18:17	24700.0	14.299	9.966	33.02	844.56
5/30/2015 19:17	24760.0	14.321	9.968	33.07	844.61
5/30/2015 20:17	24820.0	14.33	9.967	33.09	844.63
5/30/2015 21:17	24880.0	14.348	9.966	33.13	844.67
5/30/2015 22:17	24940.0	14.356	9.965	33.15	844.69
5/30/2015 23:17	25000.0	14.36	9.965	33.16	844.70
5/31/2015 0:17	25060.0	14.353	9.962	33.14	844.68
5/31/2015 1:17	25120.0	14.348	9.964	33.13	844.67
5/31/2015 2:17	25180.0	14.346	9.96	33.13	844.67
5/31/2015 3:17	25240.0	14.339	9.958	33.11	844.65
5/31/2015 4:17	25300.0	14.332	9.963	33.09	844.64
5/31/2015 5:17	25360.0	14.335	9.961	33.10	844.64
5/31/2015 6:17	25420.0	14.332	9.961	33.09	844.64
5/31/2015 7:17	25480.0	14.325	9.961	33.08	844.62
5/31/2015 8:17	25540.0	14.315	9.964	33.05	844.60
5/31/2015 9:17	25600.0	14.311	9.959	33.04	844.59
5/31/2015 10:17	25660.0	14.294	9.958	33.01	844.55
5/31/2015 11:17	25720.0	14.286	9.963	32.99	844.53
5/31/2015 12:17	25780.0	14.261	9.963	32.93	844.47
5/31/2015 13:17	25840.0	14.259	9.96	32.92	844.47
5/31/2015 14:17	25900.0	14.256	9.954	32.92	844.46
5/31/2015 15:17	25960.0	14.236	9.954	32.87	844.41
5/31/2015 16:17	26020.0	14.246	9.96	32.90	844.44
5/31/2015 17:17	26080.0	14.274	9.959	32.96	844.50
5/31/2015 18:17	26140.0	14.318	9.952	33.06	844.60
5/31/2015 19:17	26200.0	14.351	9.953	33.14	844.68
5/31/2015 20:17	26260.0	14.362	9.951	33.16	844.71
5/31/2015 21:17	26320.0	14.37	9.956	33.18	844.72
5/31/2015 22:17	26380.0	14.379	9.958	33.20	844.74
5/31/2015 23:17	26440.0	14.383	9.96	33.21	844.75
6/1/2015 0:17	26500.0	14.389	9.957	33.22	844.77
6/1/2015 1:17	26560.0	14.389	9.957	33.22	844.77
6/1/2015 2:17	26620.0	14.373	9.954	33.19	844.73

6/1/2015 3:17	26680.0	14.37	9.955	33.18	844.72
6/1/2015 4:17	26740.0	14.366	9.953	33.17	844.71
6/1/2015 5:17	26800.0	14.362	9.954	33.16	844.70
6/1/2015 6:17	26860.0	14.358	9.957	33.15	844.70
6/1/2015 7:17	26920.0	14.349	9.955	33.13	844.68
6/1/2015 8:17	26980.0	14.341	9.958	33.11	844.66
6/1/2015 9:17	27040.0	14.338	9.957	33.11	844.65
6/1/2015 10:17	27100.0	14.325	9.954	33.08	844.62
6/1/2015 11:17	27160.0	14.319	9.953	33.06	844.61
6/1/2015 12:17	27220.0	14.313	9.953	33.05	844.59
6/1/2015 13:17	27280.0	14.31	9.957	33.04	844.58
6/1/2015 14:17	27340.0	14.299	9.956	33.02	844.56
6/1/2015 15:17	27400.0	14.282	9.954	32.98	844.52
6/1/2015 16:17	27460.0	14.279	9.955	32.97	844.51
6/1/2015 17:17	27520.0	14.279	9.956	32.97	844.51
6/1/2015 18:17	27580.0	14.279	9.957	32.97	844.51
6/1/2015 19:17	27640.0	14.281	9.952	32.98	844.52
6/1/2015 20:17	27700.0	14.273	9.955	32.96	844.50
6/1/2015 21:17	27760.0	14.254	9.959	32.91	844.46
6/1/2015 22:17	27820.0	14.267	9.958	32.94	844.49
6/1/2015 23:17	27880.0	14.273	9.96	32.96	844.50
6/2/2015 0:17	27940.0	14.273	9.958	32.96	844.50
6/2/2015 1:17	28000.0	14.256	9.963	32.92	844.46
6/2/2015 2:17	28060.0	14.245	9.96	32.89	844.43
6/2/2015 3:17	28120.0	14.244	9.961	32.89	844.43
6/2/2015 4:17	28180.0	14.241	9.958	32.88	844.42
6/2/2015 5:17	28240.0	14.246	9.963	32.89	844.44
6/2/2015 6:17	28300.0	14.241	9.96	32.88	844.43
6/2/2015 7:17	28360.0	14.235	9.959	32.87	844.41
6/2/2015 8:17	28420.0	14.235	9.96	32.87	844.41
6/2/2015 9:17	28480.0	14.236	9.963	32.87	844.41
6/2/2015 10:17	28540.0	14.227	9.961	32.85	844.39
6/2/2015 11:17	28600.0	14.218	9.96	32.83	844.37
6/2/2015 12:17	28660.0	14.209	9.96	32.81	844.35
6/2/2015 13:17	28720.0	14.206	9.961	32.80	844.35
6/2/2015 14:17	28780.0	14.198	9.961	32.78	844.33
6/2/2015 15:17	28840.0	14.191	9.961	32.77	844.31
6/2/2015 16:17	28900.0	14.187	9.959	32.76	844.30
6/2/2015 17:17	28960.0	14.187	9.959	32.76	844.30
6/2/2015 18:17	29020.0	14.168	9.957	32.71	844.26
6/2/2015 19:17	29080.0	14.176	9.96	32.73	844.27



6/2/2015 20:17	29140.0	14.182	9.958	32.75	844.29
6/2/2015 21:17	29200.0	14.188	9.956	32.76	844.30
6/2/2015 22:17	29260.0	14.195	9.958	32.78	844.32
6/2/2015 23:17	29320.0	14.204	9.96	32.80	844.34
6/3/2015 0:17	29380.0	14.209	9.959	32.81	844.35
6/3/2015 1:17	29440.0	14.211	9.962	32.81	844.36
6/3/2015 2:17	29500.0	14.219	9.959	32.83	844.37
6/3/2015 3:17	29560.0	14.221	9.958	32.84	844.38
6/3/2015 4:17	29620.0	14.224	9.958	32.84	844.39
6/3/2015 5:17	29680.0	14.224	9.959	32.84	844.39
6/3/2015 6:17	29740.0	14.225	9.96	32.85	844.39
6/3/2015 7:17	29800.0	14.209	9.955	32.81	844.35
6/3/2015 8:17	29860.0	14.141	9.956	32.65	844.19
6/3/2015 9:17	29920.0	14.133	9.958	32.63	844.18
6/3/2015 10:17	29980.0	14.145	9.958	32.66	844.20
6/3/2015 11:17	30040.0	14.118	9.957	32.60	844.14
6/3/2015 12:17	30100.0	14.099	9.957	32.55	844.10
6/3/2015 13:17	30160.0	14.078	9.958	32.51	844.05
6/3/2015 14:17	30220.0	14.079	9.955	32.51	844.05
6/3/2015 15:17	30280.0	14.085	9.957	32.52	844.07
6/3/2015 16:17	30340.0	14.093	9.953	32.54	844.08
6/3/2015 17:17	30400.0	14.088	9.956	32.53	844.07
6/3/2015 18:17	30460.0	14.11	9.955	32.58	844.12
6/3/2015 19:17	30520.0	14.145	9.954	32.66	844.20
6/3/2015 20:17	30580.0	14.164	9.955	32.70	844.25
6/3/2015 21:17	30640.0	14.191	9.953	32.77	844.31
6/3/2015 22:17	30700.0	14.208	9.951	32.81	844.35
6/3/2015 23:17	30760.0	14.22	9.949	32.83	844.38
6/4/2015 0:17	30820.0	14.227	9.951	32.85	844.39
6/4/2015 1:17	30880.0	14.228	9.949	32.85	844.39
6/4/2015 2:17	30940.0	14.235	9.949	32.87	844.41
6/4/2015 3:17	31000.0	14.243	9.946	32.89	844.43
6/4/2015 4:17	31060.0	14.218	9.946	32.83	844.37
6/4/2015 5:17	31120.0	14.226	9.945	32.85	844.39
6/4/2015 6:17	31180.0	14.234	9.949	32.87	844.41
6/4/2015 7:17	31240.0	14.231	9.949	32.86	844.40
6/4/2015 8:17	31300.0	14.181	9.947	32.74	844.29
6/4/2015 9:17	31360.0	14.172	9.943	32.72	844.27
6/4/2015 10:17	31420.0	14.175	9.945	32.73	844.27
6/4/2015 11:17	31480.0	14.165	9.943	32.71	844.25
6/4/2015 12:17	31540.0	14.15	9.944	32.67	844.22

6/4/2015 13:17	31600.0	14.131	9.945	32.63	844.17
6/4/2015 14:17	31660.0	14.11	9.945	32.58	844.12
6/4/2015 15:17	31720.0	14.127	9.946	32.62	844.16
6/4/2015 16:17	31780.0	14.138	9.946	32.65	844.19
6/4/2015 17:17	31840.0	14.139	9.944	32.65	844.19
6/4/2015 18:17	31900.0	14.157	9.941	32.69	844.23
6/4/2015 19:17	31960.0	14.178	9.94	32.74	844.28
6/4/2015 20:17	32020.0	14.192	9.939	32.77	844.31
6/4/2015 21:17	32080.0	14.197	9.939	32.78	844.32
6/4/2015 22:17	32140.0	14.2	9.941	32.79	844.33
6/4/2015 23:17	32200.0	14.195	9.946	32.78	844.32
6/5/2015 0:17	32260.0	14.18	9.947	32.74	844.29
6/5/2015 1:17	32320.0	14.181	9.945	32.74	844.29
6/5/2015 2:17	32380.0	14.186	9.947	32.76	844.30
6/5/2015 3:17	32440.0	14.182	9.947	32.75	844.29
6/5/2015 4:17	32500.0	14.179	9.949	32.74	844.28
6/5/2015 5:17	32560.0	14.179	9.95	32.74	844.28
6/5/2015 6:17	32620.0	14.175	9.949	32.73	844.27
6/5/2015 7:17	32680.0	14.171	9.949	32.72	844.26
6/5/2015 8:17	32740.0	14.13	9.95	32.63	844.17
6/5/2015 9:17	32800.0	14.109	9.95	32.58	844.12
6/5/2015 10:17	32860.0	14.092	9.949	32.54	844.08
6/5/2015 11:17	32920.0	14.067	9.946	32.48	844.02
6/5/2015 12:17	32980.0	14.025	9.949	32.38	843.93
6/5/2015 13:17	33040.0	14.006	9.946	32.34	843.88
6/5/2015 14:17	33100.0	13.993	9.949	32.31	843.85
6/5/2015 15:17	33160.0	14.006	9.949	32.34	843.88
6/5/2015 16:17	33220.0	14.021	9.946	32.37	843.92
6/5/2015 17:17	33280.0	14.026	9.948	32.39	843.93
6/5/2015 18:17	33340.0	14.043	9.947	32.42	843.97
6/5/2015 19:17	33400.0	14.058	9.948	32.46	844.00
6/5/2015 20:17	33460.0	14.078	9.947	32.51	844.05
6/5/2015 21:17	33520.0	14.086	9.948	32.53	844.07
6/5/2015 22:17	33580.0	14.097	9.946	32.55	844.09
6/5/2015 23:17	33640.0	14.104	9.946	32.57	844.11
6/6/2015 0:17	33700.0	14.104	9.947	32.57	844.11
6/6/2015 1:17	33760.0	14.103	9.947	32.57	844.11
6/6/2015 2:17	33820.0	14.099	9.948	32.56	844.10
6/6/2015 3:17	33880.0	14.095	9.947	32.55	844.09
6/6/2015 4:17	33940.0	14.088	9.943	32.53	844.07
6/6/2015 5:17	34000.0	14.084	9.946	32.52	844.06

6/6/2015 6:17	34060.0	14.083	9.948	32.52	844.06
6/6/2015 7:17	34120.0	14.065	9.943	32.48	844.02
6/6/2015 8:17	34180.0	14.057	9.947	32.46	844.00
6/6/2015 9:17	34240.0	14.057	9.946	32.46	844.00
6/6/2015 10:17	34300.0	14.059	9.945	32.46	844.01
6/6/2015 11:17	34360.0	14.058	9.947	32.46	844.00
6/6/2015 12:17	34420.0	14.064	9.945	32.47	844.02
6/6/2015 13:17	34480.0	14.057	9.942	32.46	844.00
6/6/2015 14:17	34540.0	14.042	9.941	32.42	843.97
6/6/2015 15:17	34600.0	14.038	9.945	32.41	843.96
6/6/2015 16:17	34660.0	14.056	9.945	32.46	844.00
6/6/2015 17:17	34720.0	14.075	9.945	32.50	844.04
6/6/2015 18:17	34780.0	14.089	9.945	32.53	844.07
6/6/2015 19:17	34840.0	14.126	9.944	32.62	844.16
6/6/2015 20:17	34900.0	14.16	9.942	32.70	844.24
6/6/2015 21:17	34960.0	14.19	9.939	32.76	844.31
6/6/2015 22:17	35020.0	14.207	9.932	32.80	844.35
6/6/2015 23:17	35080.0	14.221	9.936	32.84	844.38
6/7/2015 0:17	35140.0	14.237	9.939	32.87	844.42
6/7/2015 1:17	35200.0	14.245	9.932	32.89	844.43
6/7/2015 2:17	35260.0	14.253	9.93	32.91	844.45
6/7/2015 3:17	35320.0	14.265	9.93	32.94	844.48
6/7/2015 4:17	35380.0	14.277	9.929	32.97	844.51
6/7/2015 5:17	35440.0	14.289	9.925	32.99	844.54
6/7/2015 6:17	35500.0	14.293	9.927	33.00	844.55
6/7/2015 7:17	35560.0	14.289	9.926	32.99	844.54
6/7/2015 8:17	35620.0	14.239	9.922	32.88	844.42
6/7/2015 9:17	35680.0	14.22	9.92	32.83	844.38
6/7/2015 10:17	35740.0	14.209	9.926	32.81	844.35
6/7/2015 11:17	35800.0	14.166	9.929	32.71	844.25
6/7/2015 12:17	35860.0	14.146	9.934	32.66	844.21
6/7/2015 13:17	35920.0	14.131	9.934	32.63	844.17
6/7/2015 14:17	35980.0	14.128	9.934	32.62	844.16
6/7/2015 15:17	36040.0	14.134	9.936	32.64	844.18
6/7/2015 16:17	36100.0	14.143	9.94	32.66	844.20
6/7/2015 17:17	36160.0	14.152	9.94	32.68	844.22
6/7/2015 18:17	36220.0	14.16	9.938	32.70	844.24
6/7/2015 19:17	36280.0	14.185	9.938	32.75	844.30
6/7/2015 20:17	36340.0	14.206	9.937	32.80	844.34
6/7/2015 21:17	36400.0	14.222	9.937	32.84	844.38
6/7/2015 22:17	36460.0	14.229	9.937	32.86	844.40

6/7/2015 23:17	36520.0	14.234	9.94	32.87	844.41
6/8/2015 0:17	36580.0	14.24	9.937	32.88	844.42
6/8/2015 1:17	36640.0	14.24	9.938	32.88	844.42
6/8/2015 2:17	36700.0	14.227	9.941	32.85	844.39
6/8/2015 3:17	36760.0	14.208	9.939	32.81	844.35
6/8/2015 4:17	36820.0	14.198	9.938	32.78	844.33
6/8/2015 5:17	36880.0	14.191	9.937	32.77	844.31
6/8/2015 6:17	36940.0	14.186	9.939	32.76	844.30
6/8/2015 7:17	37000.0	14.18	9.941	32.74	844.28
6/8/2015 8:17	37060.0	14.167	9.939	32.71	844.26
6/8/2015 9:17	37120.0	14.149	9.938	32.67	844.21
6/8/2015 10:17	37180.0	14.123	9.941	32.61	844.15
6/8/2015 11:17	37240.0	14.102	9.938	32.56	844.10
6/8/2015 12:17	37300.0	14.08	9.938	32.51	844.05
6/8/2015 13:17	37360.0	14.057	9.936	32.46	844.00
6/8/2015 14:17	37420.0	14.032	9.934	32.40	843.94
6/8/2015 15:17	37480.0	14.018	9.938	32.37	843.91
6/8/2015 16:17	37540.0	14.016	9.936	32.36	843.91
6/8/2015 17:17	37600.0	14.007	9.938	32.34	843.88
6/8/2015 18:17	37660.0	14.013	9.938	32.36	843.90
6/8/2015 19:17	37720.0	14.038	9.936	32.41	843.96
6/8/2015 20:17	37780.0	14.053	9.94	32.45	843.99
6/8/2015 21:17	37840.0	14.07	9.935	32.49	844.03
6/8/2015 22:17	37900.0	14.076	9.936	32.50	844.04
6/8/2015 23:17	37960.0	14.081	9.936	32.51	844.06
6/9/2015 0:17	38020.0	14.086	9.936	32.52	844.07
6/9/2015 1:17	38080.0	14.082	9.94	32.51	844.06
6/9/2015 2:17	38140.0	14.078	9.936	32.51	844.05
6/9/2015 3:17	38200.0	14.067	9.934	32.48	844.02
6/9/2015 4:17	38260.0	14.056	9.938	32.45	844.00
6/9/2015 5:17	38320.0	14.056	9.938	32.46	844.00
6/9/2015 6:17	38380.0	14.057	9.934	32.46	844.00
6/9/2015 7:17	38440.0	14.057	9.934	32.46	844.00
6/9/2015 8:17	38500.0	14.051	9.935	32.44	843.99
6/9/2015 9:17	38560.0	14.049	9.938	32.44	843.98
6/9/2015 10:17	38620.0	14.044	9.935	32.43	843.97
6/9/2015 11:17	38680.0	14.032	9.934	32.40	843.94
6/9/2015 12:17	38740.0	14.022	9.935	32.38	843.92
6/9/2015 13:17	38800.0	13.991	9.934	32.31	843.85
6/9/2015 14:17	38860.0	13.977	9.934	32.27	843.81
6/9/2015 15:17	38920.0	13.973	9.934	32.26	843.81

6/9/2015 16:17	38980.0	13.991	9.935	32.30	843.85
6/9/2015 17:17	39040.0	14.03	9.934	32.40	843.94
6/9/2015 18:17	39100.0	14.03	9.93	32.39	843.94
6/9/2015 19:17	39160.0	14.057	9.934	32.46	844.00
6/9/2015 20:17	39220.0	14.078	9.934	32.51	844.05
6/9/2015 21:17	39280.0	14.104	9.934	32.57	844.11
6/9/2015 22:17	39340.0	14.122	9.934	32.61	844.15
6/9/2015 23:17	39400.0	14.132	9.932	32.63	844.17
6/10/2015 0:17	39460.0	14.144	9.931	32.66	844.20
6/10/2015 1:17	39520.0	14.151	9.934	32.68	844.22
6/10/2015 2:17	39580.0	14.16	9.934	32.70	844.24
6/10/2015 3:17	39640.0	14.158	9.933	32.69	844.23
6/10/2015 4:17	39700.0	14.167	9.93	32.71	844.25
6/10/2015 5:17	39760.0	14.179	9.931	32.74	844.28
6/10/2015 6:17	39820.0	14.187	9.933	32.76	844.30
6/10/2015 7:17	39880.0	14.188	9.934	32.76	844.30
6/10/2015 8:17	39940.0	14.152	9.93	32.68	844.22
6/10/2015 9:17	40000.0	14.13	9.93	32.63	844.17
6/10/2015 10:17	40060.0	14.122	9.929	32.61	844.15
6/10/2015 11:17	40120.0	14.1	9.93	32.56	844.10
6/10/2015 12:17	40180.0	14.085	9.931	32.52	844.07
6/10/2015 13:17	40240.0	14.068	9.927	32.48	844.03
6/10/2015 14:17	40300.0	14.06	9.931	32.46	844.01
6/10/2015 15:17	40360.0	14.071	9.93	32.49	844.03
6/10/2015 16:17	40420.0	14.071	9.93	32.49	844.03
6/10/2015 17:17	40480.0	14.082	9.929	32.52	844.06
6/10/2015 18:17	40540.0	14.09	9.931	32.53	844.08
6/10/2015 19:17	40600.0	14.116	9.929	32.59	844.14
6/10/2015 20:17	40660.0	14.138	9.927	32.64	844.19
6/10/2015 21:17	40720.0	14.153	9.93	32.68	844.22
6/10/2015 22:17	40780.0	14.17	9.93	32.72	844.26
6/10/2015 23:17	40840.0	14.173	9.928	32.73	844.27
6/11/2015 0:17	40900.0	14.172	9.929	32.72	844.27
6/11/2015 1:17	40960.0	14.166	9.928	32.71	844.25
6/11/2015 2:17	41020.0	14.168	9.927	32.71	844.26
6/11/2015 3:17	41080.0	14.169	9.93	32.72	844.26
6/11/2015 4:17	41140.0	14.172	9.929	32.72	844.27
6/11/2015 5:17	41200.0	14.173	9.925	32.72	844.27
6/11/2015 6:17	41260.0	14.167	9.926	32.71	844.25
6/11/2015 7:17	41320.0	14.164	9.926	32.71	844.25
6/11/2015 8:17	41380.0	14.166	9.928	32.71	844.25

6/11/2015 9:17	41440.0	14.159	9.926	32.69	844.24
6/11/2015 10:17	41500.0	14.132	9.93	32.63	844.17
6/11/2015 11:17	41560.0	14.108	9.926	32.57	844.12
6/11/2015 12:17	41620.0	14.093	9.926	32.54	844.08
6/11/2015 13:17	41680.0	14.064	9.925	32.47	844.02
6/11/2015 14:17	41740.0	14.051	9.923	32.44	843.99
6/11/2015 15:17	41800.0	14.058	9.923	32.46	844.00
6/11/2015 16:17	41860.0	14.069	9.926	32.49	844.03
6/11/2015 17:17	41920.0	14.08	9.926	32.51	844.05
6/11/2015 18:17	41980.0	14.105	9.925	32.57	844.11
6/11/2015 19:17	42040.0	14.116	9.925	32.59	844.14
6/11/2015 20:17	42100.0	14.129	9.925	32.62	844.17
6/11/2015 21:17	42160.0	14.148	9.925	32.67	844.21
6/11/2015 22:17	42220.0	14.164	9.925	32.70	844.25
6/11/2015 23:17	42280.0	14.179	9.925	32.74	844.28
6/12/2015 0:17	42340.0	14.194	9.926	32.77	844.32
6/12/2015 1:17	42400.0	14.204	9.925	32.80	844.34
6/12/2015 2:17	42460.0	14.211	9.926	32.81	844.36
6/12/2015 3:17	42520.0	14.212	9.925	32.82	844.36
6/12/2015 4:17	42580.0	14.218	9.923	32.83	844.37
6/12/2015 5:17	42640.0	14.22	9.922	32.83	844.38
6/12/2015 6:17	42700.0	14.224	9.92	32.84	844.39
6/12/2015 7:17	42760.0	14.222	9.923	32.84	844.38
6/12/2015 8:17	42820.0	14.211	9.924	32.81	844.36
6/12/2015 9:17	42880.0	14.197	9.923	32.78	844.32
6/12/2015 10:17	42940.0	14.182	9.923	32.75	844.29
6/12/2015 11:17	43000.0	14.157	9.922	32.69	844.23
6/12/2015 12:17	43060.0	14.125	9.921	32.62	844.16
6/12/2015 13:17	43120.0	14.101	9.923	32.56	844.10
6/12/2015 14:17	43180.0	14.09	9.92	32.53	844.08
6/12/2015 15:17	43240.0	14.095	9.92	32.55	844.09
6/12/2015 16:17	43300.0	14.095	9.92	32.55	844.09
6/12/2015 17:17	43360.0	14.116	9.921	32.59	844.14
6/12/2015 18:17	43420.0	14.117	9.923	32.60	844.14
6/12/2015 19:17	43480.0	14.125	9.923	32.62	844.16
6/12/2015 20:17	43540.0	14.136	9.92	32.64	844.18
6/12/2015 21:17	43600.0	14.14	9.92	32.65	844.19
6/12/2015 22:17	43660.0	14.145	9.918	32.66	844.20
6/12/2015 23:17	43720.0	14.126	9.919	32.62	844.16
6/13/2015 0:17	43780.0	14.121	9.92	32.60	844.15
6/13/2015 1:17	43840.0	14.112	9.921	32.59	844.13

6/13/2015 2:17	43900.0	14.108	9.918	32.58	844.12
6/13/2015 3:17	43960.0	14.109	9.919	32.58	844.12
6/13/2015 4:17	44020.0	14.11	9.918	32.58	844.12
6/13/2015 5:17	44080.0	14.12	9.921	32.60	844.15
6/13/2015 6:17	44140.0	14.132	9.919	32.63	844.17
6/13/2015 7:17	44200.0	14.127	9.918	32.62	844.16
6/13/2015 8:17	44260.0	14.133	9.919	32.63	844.18
6/13/2015 9:17	44320.0	14.101	9.916	32.56	844.10
6/13/2015 10:17	44380.0	14.108	9.917	32.57	844.12
6/13/2015 11:17	44440.0	14.08	9.918	32.51	844.05
6/13/2015 12:17	44500.0	14.073	9.919	32.49	844.04
6/13/2015 13:17	44560.0	14.062	9.915	32.47	844.01
6/13/2015 14:17	44620.0	14.074	9.917	32.50	844.04
6/13/2015 15:17	44680.0	14.086	9.916	32.53	844.07
6/13/2015 16:17	44740.0	14.105	9.917	32.57	844.11
6/13/2015 17:17	44800.0	14.115	9.918	32.59	844.13
6/13/2015 18:17	44860.0	14.13	9.918	32.63	844.17
6/13/2015 19:17	44920.0	14.154	9.917	32.68	844.23
6/13/2015 20:17	44980.0	14.18	9.916	32.74	844.28
6/13/2015 21:17	45040.0	14.198	9.918	32.78	844.33
6/13/2015 22:17	45100.0	14.212	9.918	32.82	844.36
6/13/2015 23:17	45160.0	14.218	9.916	32.83	844.37
6/14/2015 0:17	45220.0	14.221	9.917	32.84	844.38
6/14/2015 1:17	45280.0	14.232	9.915	32.86	844.41
6/14/2015 2:17	45340.0	14.232	9.916	32.86	844.40
6/14/2015 3:17	45400.0	14.232	9.915	32.86	844.40
6/14/2015 4:17	45460.0	14.228	9.911	32.85	844.39
6/14/2015 5:17	45520.0	14.227	9.915	32.85	844.39
6/14/2015 6:17	45580.0	14.226	9.917	32.85	844.39
6/14/2015 7:17	45640.0	14.221	9.917	32.84	844.38
6/14/2015 8:17	45700.0	14.194	9.915	32.77	844.32
6/14/2015 9:17	45760.0	14.167	9.915	32.71	844.26
6/14/2015 10:17	45820.0	14.148	9.914	32.67	844.21
6/14/2015 11:17	45880.0	14.102	9.911	32.56	844.10
6/14/2015 12:17	45940.0	14.084	9.914	32.52	844.06
6/14/2015 13:17	46000.0	14.058	9.912	32.46	844.00
6/14/2015 14:17	46060.0	14.072	9.911	32.49	844.04
6/14/2015 15:17	46120.0	14.087	9.912	32.53	844.07
6/14/2015 16:17	46180.0	14.108	9.914	32.58	844.12
6/14/2015 17:17	46240.0	14.109	9.912	32.58	844.12
6/14/2015 18:17	46300.0	14.114	9.912	32.59	844.13

6/14/2015 19:17	46360.0	14.134	9.911	32.64	844.18
6/14/2015 20:17	46420.0	14.152	9.913	32.68	844.22
6/14/2015 21:17	46480.0	14.165	9.912	32.71	844.25
6/14/2015 22:17	46540.0	14.18	9.913	32.74	844.29
6/14/2015 23:17	46600.0	14.181	9.91	32.74	844.29
6/15/2015 0:17	46660.0	14.192	9.911	32.77	844.31
6/15/2015 1:17	46720.0	14.194	9.911	32.77	844.32
6/15/2015 2:17	46780.0	14.195	9.909	32.78	844.32
6/15/2015 3:17	46840.0	14.195	9.912	32.78	844.32
6/15/2015 4:17	46900.0	14.192	9.91	32.77	844.31
6/15/2015 5:17	46960.0	14.153	9.905	32.68	844.22
6/15/2015 6:17	47020.0	14.14	9.908	32.65	844.19
6/15/2015 7:17	47080.0	14.134	9.909	32.64	844.18
6/15/2015 8:17	47140.0	14.133	9.907	32.63	844.18
6/15/2015 9:17	47200.0	14.137	9.91	32.64	844.18
6/15/2015 10:17	47260.0	14.138	9.91	32.64	844.19
6/15/2015 11:17	47320.0	14.139	9.91	32.65	844.19
6/15/2015 12:17	47380.0	14.138	9.909	32.64	844.19
6/15/2015 13:17	47440.0	14.133	9.908	32.63	844.18
6/15/2015 14:17	47500.0	14.119	9.908	32.60	844.14
6/15/2015 15:17	47560.0	14.113	9.909	32.59	844.13
6/15/2015 16:17	47620.0	14.109	9.907	32.58	844.12
6/15/2015 17:17	47680.0	14.109	9.91	32.58	844.12
6/15/2015 18:17	47740.0	14.107	9.91	32.57	844.12
6/15/2015 19:17	47800.0	14.109	9.904	32.58	844.12
6/15/2015 20:17	47860.0	14.113	9.906	32.59	844.13
6/15/2015 21:17	47920.0	14.114	9.905	32.59	844.13
6/15/2015 22:17	47980.0	14.1	9.903	32.56	844.10
6/15/2015 23:17	48040.0	14.091	9.903	32.54	844.08
6/16/2015 0:17	48100.0	14.09	9.905	32.53	844.08
6/16/2015 1:17	48160.0	14.088	9.906	32.53	844.07
6/16/2015 2:17	48220.0	14.088	9.908	32.53	844.07
6/16/2015 3:17	48280.0	14.082	9.907	32.52	844.06
6/16/2015 4:17	48340.0	14.076	9.907	32.50	844.04
6/16/2015 5:17	48400.0	14.075	9.909	32.50	844.04
6/16/2015 6:17	48460.0	14.073	9.909	32.49	844.04
6/16/2015 7:17	48520.0	14.068	9.905	32.48	844.03
6/16/2015 8:17	48580.0	14.032	9.904	32.40	843.94
6/16/2015 9:17	48640.0	14.026	9.905	32.39	843.93
6/16/2015 10:17	48700.0	14.012	9.904	32.35	843.90
6/16/2015 11:17	48760.0	14.012	9.903	32.35	843.90



6/16/2015 12:17	48820.0	14.002	9.904	32.33	843.87
6/16/2015 13:17	48880.0	13.989	9.905	32.30	843.84
6/16/2015 14:17	48940.0	13.977	9.905	32.27	843.81
6/16/2015 15:17	49000.0	13.968	9.906	32.25	843.80
6/16/2015 16:17	49060.0	13.953	9.905	32.22	843.76
6/16/2015 17:17	49120.0	13.947	9.906	32.20	843.75
6/16/2015 18:17	49180.0	13.94	9.906	32.19	843.73
6/16/2015 19:17	49240.0	13.954	9.906	32.22	843.76
6/16/2015 20:17	49300.0	13.98	9.902	32.28	843.82
6/16/2015 21:17	49360.0	14.008	9.905	32.35	843.89
6/16/2015 22:17	49420.0	14.028	9.905	32.39	843.93
6/16/2015 23:17	49480.0	14.045	9.906	32.43	843.97
6/17/2015 0:17	49540.0	14.06	9.903	32.46	844.01
6/17/2015 1:17	49600.0	14.066	9.904	32.48	844.02
6/17/2015 2:17	49660.0	14.075	9.902	32.50	844.04
6/17/2015 3:17	49720.0	14.083	9.906	32.52	844.06
6/17/2015 4:17	49780.0	14.095	9.902	32.54	844.09
6/17/2015 5:17	49840.0	14.102	9.903	32.56	844.10
6/17/2015 6:17	49900.0	14.118	9.903	32.60	844.14
6/17/2015 7:17	49960.0	14.119	9.902	32.60	844.14
6/17/2015 8:17	50020.0	14.103	9.902	32.57	844.11
6/17/2015 9:17	50080.0	14.098	9.901	32.55	844.09
6/17/2015 10:17	50140.0	14.097	9.899	32.55	844.09
6/17/2015 11:17	50200.0	14.094	9.902	32.54	844.09
6/17/2015 12:17	50260.0	14.086	9.9	32.52	844.07
6/17/2015 13:17	50320.0	14.07	9.896	32.49	844.03
6/17/2015 14:17	50380.0	14.064	9.899	32.47	844.02
6/17/2015 15:17	50440.0	14.063	9.899	32.47	844.01
6/17/2015 16:17	50500.0	14.078	9.899	32.51	844.05
6/17/2015 17:17	50560.0	14.091	9.902	32.54	844.08
6/17/2015 18:17	50620.0	14.101	9.9	32.56	844.10
6/17/2015 19:17	50680.0	14.125	9.898	32.62	844.16
6/17/2015 20:17	50740.0	14.141	9.902	32.65	844.19
6/17/2015 21:17	50800.0	14.15	9.899	32.67	844.21
6/17/2015 22:17	50860.0	14.159	9.899	32.69	844.24
6/17/2015 23:17	50920.0	14.17	9.9	32.72	844.26
6/18/2015 0:17	50980.0	14.166	9.899	32.71	844.25
6/18/2015 1:17	51040.0	14.162	9.898	32.70	844.24
6/18/2015 2:17	51100.0	14.15	9.897	32.67	844.22
6/18/2015 3:17	51160.0	14.145	9.896	32.66	844.20
6/18/2015 4:17	51220.0	14.143	9.896	32.66	844.20

6/18/2015 5:17	51280.0	14.138	9.896	32.65	844.19
6/18/2015 6:17	51340.0	14.135	9.899	32.64	844.18
6/18/2015 7:17	51400.0	14.123	9.896	32.61	844.15
6/18/2015 8:17	51460.0	14.115	9.893	32.59	844.13
6/18/2015 9:17	51520.0	14.097	9.891	32.55	844.09
6/18/2015 10:17	51580.0	14.086	9.894	32.52	844.07
6/18/2015 11:17	51640.0	14.043	9.891	32.43	843.97
6/18/2015 12:17	51700.0	14.021	9.892	32.37	843.92
6/18/2015 13:17	51760.0	13.994	9.893	32.31	843.85
6/18/2015 14:17	51820.0	13.986	9.893	32.29	843.84
6/18/2015 15:17	51880.0	13.99	9.897	32.30	843.85
6/18/2015 16:17	51940.0	13.993	9.896	32.31	843.85
6/18/2015 17:17	52000.0	13.994	9.893	32.31	843.86
6/18/2015 18:17	52060.0	13.906	9.895	32.11	843.65
6/18/2015 19:17	52120.0	13.945	9.896	32.20	843.74
6/18/2015 20:17	52180.0	13.969	9.896	32.26	843.80
6/18/2015 21:17	52240.0	13.985	9.895	32.29	843.83
6/18/2015 22:17	52300.0	14.003	9.896	32.33	843.88
6/18/2015 23:17	52360.0	14.03	9.894	32.40	843.94
6/19/2015 0:17	52420.0	14.02	9.896	32.37	843.91
6/19/2015 1:17	52480.0	14.025	9.895	32.38	843.93
6/19/2015 2:17	52540.0	14.013	9.896	32.36	843.90
6/19/2015 3:17	52600.0	14.013	9.897	32.35	843.90
6/19/2015 4:17	52660.0	14.011	9.896	32.35	843.89
6/19/2015 5:17	52720.0	14.011	9.898	32.35	843.90
6/19/2015 6:17	52780.0	14.013	9.896	32.36	843.90
6/19/2015 7:17	52840.0	14.008	9.895	32.34	843.89
6/19/2015 8:17	52900.0	13.999	9.896	32.32	843.87
6/19/2015 9:17	52960.0	13.986	9.896	32.29	843.84
6/19/2015 10:17	53020.0	13.965	9.893	32.24	843.79
6/19/2015 11:17	53080.0	13.954	9.895	32.22	843.76
6/19/2015 12:17	53140.0	13.942	9.896	32.19	843.73
6/19/2015 13:17	53200.0	13.933	9.897	32.17	843.71
6/19/2015 14:17	53260.0	13.94	9.896	32.19	843.73
6/19/2015 15:17	53320.0	13.943	9.896	32.20	843.74
6/19/2015 16:17	53380.0	13.952	9.895	32.22	843.76
6/19/2015 17:17	53440.0	13.958	9.894	32.23	843.77
6/19/2015 18:17	53500.0	13.963	9.894	32.24	843.78
6/19/2015 19:17	53560.0	13.978	9.89	32.28	843.82
6/19/2015 20:17	53620.0	14.005	9.891	32.34	843.88
6/19/2015 21:17	53680.0	14.038	9.894	32.41	843.96

6/19/2015 22:17	53740.0	14.061	9.895	32.47	844.01
6/19/2015 23:17	53800.0	14.077	9.894	32.50	844.05
6/20/2015 0:17	53860.0	14.09	9.893	32.53	844.08
6/20/2015 1:17	53920.0	14.106	9.896	32.57	844.11
6/20/2015 2:17	53980.0	14.12	9.894	32.60	844.15
6/20/2015 3:17	54040.0	14.135	9.893	32.64	844.18
6/20/2015 4:17	54100.0	14.141	9.89	32.65	844.20
6/20/2015 5:17	54160.0	14.149	9.893	32.67	844.21
6/20/2015 6:17	54220.0	14.152	9.895	32.68	844.22
6/20/2015 7:17	54280.0	14.153	9.895	32.68	844.22
6/20/2015 8:17	54340.0	14.142	9.893	32.65	844.20
6/20/2015 9:17	54400.0	14.127	9.893	32.62	844.16
6/20/2015 10:17	54460.0	14.114	9.891	32.59	844.13
6/20/2015 11:17	54520.0	14.095	9.891	32.54	844.09
6/20/2015 12:17	54580.0	14.08	9.894	32.51	844.05
6/20/2015 13:17	54640.0	14.084	9.891	32.52	844.06
6/20/2015 14:17	54700.0	14.087	9.892	32.53	844.07
6/20/2015 15:17	54760.0	14.102	9.892	32.56	844.11
6/20/2015 16:17	54820.0	14.105	9.891	32.57	844.11
6/20/2015 17:17	54880.0	14.09	9.89	32.53	844.08
6/20/2015 18:17	54940.0	14.063	9.889	32.47	844.01
6/20/2015 19:17	55000.0	14.06	9.889	32.46	844.01
6/20/2015 20:17	55060.0	14.052	9.886	32.45	843.99
6/20/2015 21:17	55120.0	14.044	9.889	32.43	843.97
6/20/2015 22:17	55180.0	14.028	9.888	32.39	843.93
6/20/2015 23:17	55240.0	14.02	9.891	32.37	843.92
6/21/2015 0:17	55300.0	14.003	9.89	32.33	843.88
6/21/2015 1:17	55360.0	13.96	9.887	32.23	843.78
6/21/2015 2:17	55420.0	13.961	9.887	32.24	843.78
6/21/2015 3:17	55480.0	13.963	9.891	32.24	843.78
6/21/2015 4:17	55540.0	13.947	9.892	32.20	843.75
6/21/2015 5:17	55600.0	13.932	9.89	32.17	843.71
6/21/2015 6:17	55660.0	13.919	9.889	32.14	843.68
6/21/2015 7:17	55720.0	13.911	9.892	32.12	843.66
6/21/2015 8:17	55780.0	13.903	9.889	32.10	843.64
6/21/2015 9:17	55840.0	13.895	9.887	32.08	843.63
6/21/2015 10:17	55900.0	13.885	9.888	32.06	843.60
6/21/2015 11:17	55960.0	13.886	9.889	32.06	843.61
6/21/2015 12:17	56020.0	13.86	9.888	32.00	843.55
6/21/2015 13:17	56080.0	13.859	9.89	32.00	843.54
6/21/2015 14:17	56140.0	13.856	9.886	31.99	843.54

6/21/2015 15:17	56200.0	13.855	9.891	31.99	843.53
6/21/2015 16:17	56260.0	13.855	9.886	31.99	843.53
6/21/2015 17:17	56320.0	13.861	9.889	32.01	843.55
6/21/2015 18:17	56380.0	13.886	9.889	32.06	843.61
6/21/2015 19:17	56440.0	13.931	9.889	32.17	843.71
6/21/2015 20:17	56500.0	13.955	9.89	32.22	843.77
6/21/2015 21:17	56560.0	13.975	9.889	32.27	843.81
6/21/2015 22:17	56620.0	13.989	9.886	32.30	843.84
6/21/2015 23:17	56680.0	14	9.888	32.33	843.87
6/22/2015 0:17	56740.0	14.006	9.885	32.34	843.88
6/22/2015 1:17	56800.0	14.017	9.887	32.37	843.91
6/22/2015 2:17	56860.0	14.022	9.885	32.38	843.92
6/22/2015 3:17	56920.0	14.029	9.886	32.39	843.94
6/22/2015 4:17	56980.0	14.037	9.886	32.41	843.95
6/22/2015 5:17	57040.0	14.049	9.887	32.44	843.98
6/22/2015 6:17	57100.0	14.067	9.884	32.48	844.02
6/22/2015 7:17	57160.0	14.073	9.884	32.50	844.04
6/22/2015 8:17	57220.0	14.064	9.884	32.47	844.02
6/22/2015 9:17	57280.0	14.048	9.884	32.44	843.98
6/22/2015 10:17	57340.0	14.045	9.884	32.43	843.97
6/22/2015 11:17	57400.0	14.028	9.882	32.39	843.93
6/22/2015 12:17	57460.0	14.016	9.88	32.36	843.91

**Table 3. Well DM-4 Data**

Date and Time	Elapsed Time (mins)	Pressure (psi)	Temperature (°C)	Depth (ft)	Elevation (ft)
5/13/2015 13:47	0.0	17.922	13.808	41.4	833.0
5/13/2015 13:47	0.004	17.922	13.827	41.4	833.0
5/13/2015 13:47	0.008	17.918	13.836	41.4	833.0
5/13/2015 13:47	0.013	17.914	13.844	41.4	833.0
5/13/2015 13:47	0.017	17.915	13.848	41.4	833.0
5/13/2015 13:47	0.021	17.914	13.853	41.4	833.0
5/13/2015 13:47	0.025	17.912	13.853	41.4	833.0
5/13/2015 13:47	0.029	17.908	13.853	41.4	833.0
5/13/2015 13:47	0.033	17.905	13.853	41.3	832.9
5/13/2015 13:47	0.038	17.904	13.851	41.3	832.9
5/13/2015 13:47	0.042	17.914	13.864	41.4	833.0
5/13/2015 13:47	0.046	17.907	13.855	41.3	832.9
5/13/2015 13:47	0.050	17.901	13.853	41.3	832.9
5/13/2015 13:47	0.054	17.901	13.853	41.3	832.9
5/13/2015 13:47	0.058	17.898	13.85	41.3	832.9
5/13/2015 13:47	0.063	17.897	13.846	41.3	832.9
5/13/2015 13:47	0.067	17.898	13.845	41.3	832.9
5/13/2015 13:47	0.071	17.897	13.842	41.3	832.9
5/13/2015 13:47	0.075	17.894	13.84	41.3	832.9
5/13/2015 13:47	0.079	17.892	13.842	41.3	832.9
5/13/2015 13:47	0.083	17.89	13.837	41.3	832.9
5/13/2015 13:47	0.088	17.887	13.832	41.3	832.9
5/13/2015 13:47	0.092	17.887	13.831	41.3	832.9
5/13/2015 13:47	0.096	17.887	13.829	41.3	832.9
5/13/2015 13:47	0.100	17.887	13.828	41.3	832.9
5/13/2015 13:47	0.106	17.885	13.812	41.3	832.9
5/13/2015 13:47	0.112	17.877	13.804	41.3	832.9
5/13/2015 13:47	0.119	17.87	13.791	41.3	832.9
5/13/2015 13:47	0.126	17.863	13.78	41.2	832.8
5/13/2015 13:47	0.133	17.867	13.773	41.3	832.9
5/13/2015 13:47	0.141	17.879	13.764	41.3	832.9
5/13/2015 13:47	0.150	17.863	13.751	41.2	832.8
5/13/2015 13:47	0.158	17.888	13.747	41.3	832.9
5/13/2015 13:47	0.168	17.87	13.733	41.3	832.9
5/13/2015 13:47	0.178	17.876	13.724	41.3	832.9
5/13/2015 13:47	0.188	17.914	13.711	41.4	833.0
5/13/2015 13:47	0.199	17.841	13.703	41.2	832.8
5/13/2015 13:47	0.211	17.869	13.689	41.3	832.9
5/13/2015 13:47	0.224	17.865	13.68	41.3	832.9
5/13/2015 13:47	0.237	17.856	13.667	41.2	832.8
5/13/2015 13:47	0.251	17.856	13.654	41.2	832.8
5/13/2015 13:47	0.266	17.852	13.642	41.2	832.8
5/13/2015 13:47	0.282	17.846	13.624	41.2	832.8
5/13/2015 13:47	0.298	17.847	13.615	41.2	832.8
5/13/2015 13:47	0.316	17.842	13.599	41.2	832.8
5/13/2015 13:47	0.335	17.835	13.584	41.2	832.8
5/13/2015 13:48	0.355	17.835	13.57	41.2	832.8

5/13/2015 13:48	0.376	17.831	13.549	41.2	832.8
5/13/2015 13:48	0.398	17.823	13.536	41.2	832.8
5/13/2015 13:48	0.422	17.823	13.515	41.2	832.8
5/13/2015 13:48	0.447	17.814	13.495	41.1	832.7
5/13/2015 13:48	0.473	17.815	13.474	41.1	832.7
5/13/2015 13:48	0.501	17.807	13.457	41.1	832.7
5/13/2015 13:48	0.531	17.802	13.433	41.1	832.7
5/13/2015 13:48	0.562	17.799	13.411	41.1	832.7
5/13/2015 13:48	0.596	17.793	13.383	41.1	832.7
5/13/2015 13:48	0.631	17.787	13.358	41.1	832.7
5/13/2015 13:48	0.668	17.782	13.337	41.1	832.7
5/13/2015 13:48	0.708	17.776	13.308	41.0	832.6
5/13/2015 13:48	0.750	17.771	13.279	41.0	832.6
5/13/2015 13:48	0.794	17.766	13.249	41.0	832.6
5/13/2015 13:48	0.841	17.757	13.216	41.0	832.6
5/13/2015 13:48	0.891	17.751	13.187	41.0	832.6
5/13/2015 13:48	0.944	17.745	13.149	41.0	832.6
5/13/2015 13:48	1.00	17.736	13.115	41.0	832.6
5/13/2015 13:48	1.06	17.729	13.077	40.9	832.5
5/13/2015 13:48	1.12	17.722	13.043	40.9	832.5
5/13/2015 13:48	1.19	17.712	12.997	40.9	832.5
5/13/2015 13:48	1.26	17.704	12.959	40.9	832.5
5/13/2015 13:48	1.33	17.697	12.92	40.9	832.5
5/13/2015 13:49	1.41	17.688	12.875	40.8	832.4
5/13/2015 13:49	1.50	17.679	12.823	40.8	832.4
5/13/2015 13:49	1.58	17.668	12.783	40.8	832.4
5/13/2015 13:49	1.68	17.657	12.734	40.8	832.4
5/13/2015 13:49	1.78	17.648	12.68	40.7	832.3
5/13/2015 13:49	1.88	17.636	12.633	40.7	832.3
5/13/2015 13:49	1.99	17.625	12.582	40.7	832.3
5/13/2015 13:49	2.11	17.613	12.53	40.7	832.3
5/13/2015 13:49	2.24	17.6	12.473	40.6	832.2
5/13/2015 13:50	2.37	17.585	12.416	40.6	832.2
5/13/2015 13:50	2.51	17.572	12.36	40.6	832.2
5/13/2015 13:50	2.66	17.556	12.303	40.5	832.1
5/13/2015 13:50	2.82	17.539	12.242	40.5	832.1
5/13/2015 13:50	2.98	17.522	12.188	40.5	832.1
5/13/2015 13:50	3.16	17.501	12.125	40.4	832.0
5/13/2015 13:51	3.35	17.482	12.066	40.4	832.0
5/13/2015 13:51	3.55	17.456	12.003	40.3	831.9
5/13/2015 13:51	3.76	17.43	11.944	40.2	831.8
5/13/2015 13:51	3.98	17.404	11.885	40.2	831.8
5/13/2015 13:51	4.22	17.375	11.822	40.1	831.7
5/13/2015 13:52	4.47	17.35	11.761	40.1	831.7
5/13/2015 13:52	4.73	17.318	11.707	40.0	831.6
5/13/2015 13:52	5.01	17.285	11.65	39.9	831.5
5/13/2015 13:52	5.31	17.212	11.587	39.7	831.3
5/13/2015 13:53	5.62	17.163	11.53	39.6	831.2
5/13/2015 13:53	5.96	17.042	11.475	39.3	831.0
5/13/2015 13:53	6.31	17.01	11.42	39.3	830.9

5/13/2015 13:54	6.68	16.984	11.369	39.2	830.8
5/13/2015 13:54	7.08	16.955	11.313	39.1	830.8
5/13/2015 13:55	7.50	16.925	11.268	39.1	830.7
5/13/2015 13:55	7.94	16.892	11.221	39.0	830.6
5/13/2015 13:56	8.41	16.856	11.171	38.9	830.5
5/13/2015 13:56	8.91	16.817	11.134	38.8	830.4
5/13/2015 13:57	9.44	16.773	11.094	38.7	830.3
5/13/2015 13:57	10.00	16.727	11.059	38.6	830.2
5/13/2015 13:58	10.60	16.677	11.021	38.5	830.1
5/13/2015 13:58	11.20	16.627	10.987	38.4	830.0
5/13/2015 13:59	11.90	16.569	10.958	38.3	829.9
5/13/2015 14:00	12.60	16.506	10.925	38.1	829.7
5/13/2015 14:00	13.30	16.453	10.901	38.0	829.6
5/13/2015 14:01	14.10	16.383	10.874	37.8	829.4
5/13/2015 14:02	15.00	16.312	10.847	37.7	829.3
5/13/2015 14:03	15.80	16.247	10.83	37.5	829.1
5/13/2015 14:04	16.80	16.169	10.808	37.3	828.9
5/13/2015 14:05	17.80	16.093	10.786	37.2	828.8
5/13/2015 14:06	18.80	16.018	10.771	37.0	828.6
5/13/2015 14:07	19.90	15.938	10.753	36.8	828.4
5/13/2015 14:08	21.10	15.855	10.735	36.6	828.2
5/13/2015 14:10	22.40	15.767	10.719	36.4	828.0
5/13/2015 14:11	23.70	15.68	10.703	36.2	827.8
5/13/2015 14:12	25.10	15.587	10.691	36.0	827.6
5/13/2015 14:14	26.60	15.495	10.679	35.8	827.4
5/13/2015 14:15	28.20	15.4	10.663	35.6	827.2
5/13/2015 14:17	29.80	15.309	10.652	35.3	826.9
5/13/2015 14:19	31.60	15.211	10.639	35.1	826.7
5/13/2015 14:21	33.50	15.119	10.629	34.9	826.5
5/13/2015 14:23	35.50	15.027	10.617	34.7	826.3
5/13/2015 14:25	37.60	14.941	10.606	34.5	826.1
5/13/2015 14:27	39.80	14.858	10.597	34.3	825.9
5/13/2015 14:29	42.20	14.774	10.586	34.1	825.7
5/13/2015 14:32	44.70	14.693	10.575	33.9	825.5
5/13/2015 14:34	47.30	14.618	10.566	33.8	825.4
5/13/2015 14:37	50.10	14.547	10.557	33.6	825.2
5/13/2015 14:40	53.10	14.477	10.545	33.4	825.0
5/13/2015 14:43	56.20	14.409	10.537	33.3	824.9
5/13/2015 14:47	59.60	14.352	10.53	33.1	824.7
5/13/2015 14:50	63.10	14.304	10.522	33.0	824.6
5/13/2015 14:54	66.80	14.266	10.515	32.9	824.5
5/13/2015 14:58	70.80	14.229	10.504	32.9	824.5
5/13/2015 15:02	75.00	14.193	10.496	32.8	824.4
5/13/2015 15:07	79.40	14.16	10.486	32.7	824.3
5/13/2015 15:11	84.10	14.119	10.476	32.6	824.2
5/13/2015 15:16	89.10	14.086	10.465	32.5	824.1
5/13/2015 15:22	94.40	14.051	10.457	32.4	824.0
5/13/2015 15:27	100.0	14.023	10.451	32.4	824.0
5/13/2015 15:33	106.0	13.991	10.445	32.3	823.9
5/13/2015 15:39	112.0	13.962	10.441	32.2	823.8

5/13/2015 15:46	119.0	13.926	10.434	32.2	823.8
5/13/2015 15:53	126.0	13.894	10.43	32.1	823.7
5/13/2015 16:00	133.0	13.86	10.427	32.0	823.6
5/13/2015 16:08	141.0	13.806	10.419	31.9	823.5
5/13/2015 16:17	150.0	13.764	10.417	31.8	823.4
5/13/2015 16:25	158.0	13.734	10.417	31.7	823.3
5/13/2015 16:35	168.0	13.695	10.415	31.6	823.2
5/13/2015 16:45	178.0	13.645	10.413	31.5	823.1
5/13/2015 16:55	188.0	13.607	10.404	31.4	823.0
5/13/2015 17:06	199.0	13.574	10.403	31.3	822.9
5/13/2015 17:18	211.0	13.528	10.409	31.2	822.8
5/13/2015 17:31	224.0	13.452	10.407	31.1	822.7
5/13/2015 17:44	237.0	13.382	10.406	30.9	822.5
5/13/2015 17:58	251.0	13.316	10.403	30.7	822.3
5/13/2015 18:13	266.0	13.27	10.406	30.6	822.2
5/13/2015 18:29	282.0	13.228	10.4	30.5	822.1
5/13/2015 18:45	298.0	13.195	10.388	30.5	822.1
5/13/2015 19:03	316.0	13.172	10.384	30.4	822.0
5/13/2015 19:22	335.0	13.126	10.38	30.3	821.9
5/13/2015 19:42	355.0	13.122	10.379	30.3	821.9
5/13/2015 20:03	376.0	13.104	10.376	30.3	821.9
5/13/2015 20:25	398.0	13.072	10.37	30.2	821.8
5/13/2015 20:49	422.0	13.034	10.376	30.1	821.7
5/13/2015 21:14	447.0	12.997	10.375	30.0	821.6
5/13/2015 21:40	473.0	12.956	10.361	29.9	821.5
5/13/2015 22:08	501.0	12.912	10.358	29.8	821.4
5/13/2015 22:38	531.0	12.869	10.372	29.7	821.3
5/13/2015 23:09	562.0	12.445	10.364	28.7	820.3
5/13/2015 23:43	596.0	12.407	10.383	28.6	820.2
5/14/2015 0:18	631.0	12.368	10.378	28.6	820.2
5/14/2015 0:55	668.0	12.331	10.369	28.5	820.1
5/14/2015 1:35	708.0	12.288	10.365	28.4	820.0
5/14/2015 2:17	750.0	12.251	10.366	28.3	819.9
5/14/2015 3:01	794.0	12.207	10.392	28.2	819.8
5/14/2015 3:48	841.0	12.175	10.376	28.1	819.7
5/14/2015 4:38	891.0	12.141	10.378	28.0	819.6
5/14/2015 5:31	944.0	12.107	10.372	28.0	819.6
5/14/2015 6:27	1000.0	12.068	10.386	27.9	819.5
5/14/2015 7:27	1060.0	12.031	10.379	27.8	819.4
5/14/2015 8:27	1120.0	11.959	10.378	27.6	819.2
5/14/2015 9:27	1180.0	11.887	10.369	27.4	819.0
5/14/2015 10:27	1240.0	11.792	10.373	27.2	818.8
5/14/2015 11:27	1300.0	11.751	10.39	27.1	818.7
5/14/2015 12:27	1360.0	11.719	10.386	27.1	818.7
5/14/2015 13:27	1420.0	11.692	10.384	27.0	818.6
5/14/2015 14:27	1480.0	11.68	10.367	27.0	818.6
5/14/2015 15:27	1540.0	11.667	10.369	26.9	818.5
5/14/2015 16:27	1600.0	11.65	10.37	26.9	818.5
5/14/2015 17:27	1660.0	11.622	10.398	26.8	818.4
5/14/2015 18:27	1720.0	11.611	10.397	26.8	818.4



5/14/2015 19:27	1780.0	11.604	10.377	26.8	818.4
5/14/2015 20:27	1840.0	11.588	10.375	26.8	818.4
5/14/2015 21:27	1900.0	11.559	10.39	26.7	818.3
5/14/2015 22:27	1960.0	11.544	10.373	26.7	818.3
5/14/2015 23:27	2020.0	11.528	10.367	26.6	818.2
5/15/2015 0:27	2080.0	11.517	10.371	26.6	818.2
5/15/2015 1:27	2140.0	11.508	10.372	26.6	818.2
5/15/2015 2:27	2200.0	11.492	10.384	26.5	818.1
5/15/2015 3:27	2260.0	11.483	10.372	26.5	818.1
5/15/2015 4:27	2320.0	11.474	10.377	26.5	818.1
5/15/2015 5:27	2380.0	11.464	10.38	26.5	818.1
5/15/2015 6:27	2440.0	11.452	10.37	26.4	818.0
5/15/2015 7:27	2500.0	11.44	10.377	26.4	818.0
5/15/2015 8:27	2560.0	11.43	10.384	26.4	818.0
5/15/2015 9:27	2620.0	11.423	10.362	26.4	818.0
5/15/2015 10:27	2680.0	11.412	10.368	26.4	818.0
5/15/2015 11:27	2740.0	11.407	10.375	26.3	817.9
5/15/2015 12:27	2800.0	11.401	10.365	26.3	817.9
5/15/2015 13:27	2860.0	11.405	10.361	26.3	817.9
5/15/2015 14:27	2920.0	11.381	10.378	26.3	817.9
5/15/2015 15:27	2980.0	11.399	10.373	26.3	817.9
5/15/2015 16:27	3040.0	11.4	10.384	26.3	817.9
5/15/2015 17:27	3100.0	11.377	10.379	26.3	817.9
5/15/2015 18:27	3160.0	11.395	10.367	26.3	817.9
5/15/2015 19:27	3220.0	11.388	10.366	26.3	817.9
5/15/2015 20:27	3280.0	11.378	10.373	26.3	817.9
5/15/2015 21:27	3340.0	11.373	10.382	26.3	817.9
5/15/2015 22:27	3400.0	11.37	10.371	26.3	817.9
5/15/2015 23:27	3460.0	11.365	10.365	26.2	817.8
5/16/2015 0:27	3520.0	11.359	10.372	26.2	817.8
5/16/2015 1:27	3580.0	11.354	10.366	26.2	817.8
5/16/2015 2:27	3640.0	11.35	10.37	26.2	817.8
5/16/2015 3:27	3700.0	11.348	10.383	26.2	817.8
5/16/2015 4:27	3760.0	11.342	10.369	26.2	817.8
5/16/2015 5:27	3820.0	11.339	10.348	26.2	817.8
5/16/2015 6:27	3880.0	11.334	10.359	26.2	817.8
5/16/2015 7:27	3940.0	11.328	10.371	26.2	817.8
5/16/2015 8:27	4000.0	11.326	10.367	26.2	817.8
5/16/2015 9:27	4060.0	11.322	10.375	26.1	817.7
5/16/2015 10:27	4120.0	11.321	10.386	26.1	817.7
5/16/2015 11:27	4180.0	11.316	10.385	26.1	817.7
5/16/2015 12:27	4240.0	11.312	10.393	26.1	817.7
5/16/2015 13:27	4300.0	11.298	10.381	26.1	817.7
5/16/2015 14:27	4360.0	11.312	10.383	26.1	817.7
5/16/2015 15:27	4420.0	11.317	10.366	26.1	817.7
5/16/2015 16:27	4480.0	11.302	10.373	26.1	817.7
5/16/2015 17:27	4540.0	11.31	10.371	26.1	817.7
5/16/2015 18:27	4600.0	11.305	10.372	26.1	817.7
5/16/2015 19:27	4660.0	11.3	10.368	26.1	817.7
5/16/2015 20:27	4720.0	11.298	10.358	26.1	817.7

5/16/2015 21:27	4780.0	11.291	10.364	26.1	817.7
5/16/2015 22:27	4840.0	11.286	10.379	26.1	817.7
5/16/2015 23:27	4900.0	11.284	10.37	26.1	817.7
5/17/2015 0:27	4960.0	11.281	10.365	26.0	817.6
5/17/2015 1:27	5020.0	11.278	10.373	26.0	817.6
5/17/2015 2:27	5080.0	11.28	10.367	26.0	817.6
5/17/2015 3:27	5140.0	11.28	10.359	26.0	817.6
5/17/2015 4:27	5200.0	11.278	10.373	26.0	817.6
5/17/2015 5:27	5260.0	11.277	10.369	26.0	817.6
5/17/2015 6:27	5320.0	11.272	10.355	26.0	817.6
5/17/2015 7:27	5380.0	11.267	10.372	26.0	817.6
5/17/2015 8:27	5440.0	11.265	10.361	26.0	817.6
5/17/2015 9:27	5500.0	11.264	10.348	26.0	817.6
5/17/2015 10:27	5560.0	11.26	10.361	26.0	817.6
5/17/2015 11:27	5620.0	11.252	10.363	26.0	817.6
5/17/2015 12:27	5680.0	11.251	10.388	26.0	817.6
5/17/2015 13:27	5740.0	11.239	10.355	26.0	817.6
5/17/2015 14:27	5800.0	11.263	10.35	26.0	817.6
5/17/2015 15:27	5860.0	11.242	10.344	26.0	817.6
5/17/2015 16:27	5920.0	11.264	10.364	26.0	817.6
5/17/2015 17:27	5980.0	11.242	10.36	26.0	817.6
5/17/2015 18:27	6040.0	11.244	10.367	26.0	817.6
5/17/2015 19:27	6100.0	11.278	10.35	26.0	817.6
5/17/2015 20:27	6160.0	11.263	10.358	26.0	817.6
5/17/2015 21:27	6220.0	11.248	10.375	26.0	817.6
5/17/2015 22:27	6280.0	11.243	10.368	26.0	817.6
5/17/2015 23:27	6340.0	11.241	10.372	26.0	817.6
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5/18/2015 3:27	6580.0	11.233	10.362	25.9	817.5
5/18/2015 4:27	6640.0	11.234	10.338	25.9	817.5
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5/18/2015 6:27	6760.0	11.226	10.346	25.9	817.5
5/18/2015 7:27	6820.0	11.222	10.359	25.9	817.5
5/18/2015 8:27	6880.0	11.219	10.357	25.9	817.5
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5/18/2015 11:27	7060.0	11.206	10.362	25.9	817.5
5/18/2015 12:27	7120.0	11.203	10.347	25.9	817.5
5/18/2015 13:27	7180.0	11.218	10.348	25.9	817.5
5/18/2015 14:27	7240.0	11.218	10.358	25.9	817.5
5/18/2015 15:27	7300.0	11.214	10.361	25.9	817.5
5/18/2015 16:27	7360.0	11.198	10.355	25.9	817.5
5/18/2015 17:27	7420.0	11.211	10.356	25.9	817.5
5/18/2015 18:27	7480.0	11.213	10.347	25.9	817.5
5/18/2015 19:27	7540.0	11.212	10.351	25.9	817.5
5/18/2015 20:27	7600.0	11.211	10.345	25.9	817.5
5/18/2015 21:27	7660.0	11.209	10.34	25.9	817.5
5/18/2015 22:27	7720.0	11.211	10.361	25.9	817.5

5/18/2015 23:27	7780.0	11.209	10.368	25.9	817.5
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5/19/2015 2:27	7960.0	11.204	10.365	25.9	817.5
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5/19/2015 4:27	8080.0	11.201	10.355	25.9	817.5
5/19/2015 5:27	8140.0	11.2	10.35	25.9	817.5
5/19/2015 6:27	8200.0	11.201	10.371	25.9	817.5
5/19/2015 7:27	8260.0	11.2	10.356	25.9	817.5
5/19/2015 8:27	8320.0	11.196	10.375	25.9	817.5
5/19/2015 9:27	8380.0	11.197	10.357	25.9	817.5
5/19/2015 10:27	8440.0	11.195	10.354	25.8	817.5
5/19/2015 11:27	8500.0	11.195	10.354	25.8	817.5
5/19/2015 12:27	8560.0	11.189	10.356	25.8	817.4
5/19/2015 13:27	8620.0	11.188	10.345	25.8	817.4
5/19/2015 14:27	8680.0	11.182	10.353	25.8	817.4
5/19/2015 15:27	8740.0	11.186	10.361	25.8	817.4
5/19/2015 16:27	8800.0	11.19	10.359	25.8	817.4
5/19/2015 17:27	8860.0	11.18	10.362	25.8	817.4
5/19/2015 18:27	8920.0	11.178	10.351	25.8	817.4
5/19/2015 19:27	8980.0	11.231	10.361	25.9	817.5
5/19/2015 20:27	9040.0	11.202	10.364	25.9	817.5
5/19/2015 21:27	9100.0	11.192	10.357	25.8	817.4
5/19/2015 22:27	9160.0	11.189	10.343	25.8	817.4
5/19/2015 23:27	9220.0	11.189	10.357	25.8	817.4
5/20/2015 0:27	9280.0	11.184	10.35	25.8	817.4
5/20/2015 1:27	9340.0	11.184	10.352	25.8	817.4
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5/20/2015 4:27	9520.0	11.181	10.36	25.8	817.4
5/20/2015 5:27	9580.0	11.182	10.357	25.8	817.4
5/20/2015 6:27	9640.0	11.18	10.351	25.8	817.4
5/20/2015 7:27	9700.0	11.179	10.354	25.8	817.4
5/20/2015 8:27	9760.0	11.177	10.347	25.8	817.4
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5/20/2015 10:27	9880.0	11.172	10.343	25.8	817.4
5/20/2015 11:27	9940.0	11.168	10.37	25.8	817.4
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5/20/2015 14:27	10120.0	11.167	10.358	25.8	817.4
5/20/2015 15:27	10180.0	11.165	10.349	25.8	817.4
5/20/2015 16:27	10240.0	11.165	10.348	25.8	817.4
5/20/2015 17:27	10300.0	11.157	10.35	25.8	817.4
5/20/2015 18:27	10360.0	11.168	10.337	25.8	817.4
5/20/2015 19:27	10420.0	11.158	10.361	25.8	817.4
5/20/2015 20:27	10480.0	11.158	10.343	25.8	817.4
5/20/2015 21:27	10540.0	11.152	10.343	25.7	817.4
5/20/2015 22:27	10600.0	11.152	10.346	25.7	817.4
5/20/2015 23:27	10660.0	11.151	10.343	25.7	817.3
5/21/2015 0:27	10720.0	11.15	10.348	25.7	817.3

5/21/2015 1:27	10780.0	11.149	10.344	25.7	817.3
5/21/2015 2:27	10840.0	11.147	10.348	25.7	817.3
5/21/2015 3:27	10900.0	11.143	10.349	25.7	817.3
5/21/2015 4:27	10960.0	11.144	10.346	25.7	817.3
5/21/2015 5:27	11020.0	11.142	10.348	25.7	817.3
5/21/2015 6:27	11080.0	11.138	10.335	25.7	817.3
5/21/2015 7:27	11140.0	11.138	10.346	25.7	817.3
5/21/2015 8:27	11200.0	11.134	10.342	25.7	817.3
5/21/2015 9:27	11260.0	11.134	10.34	25.7	817.3
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5/21/2015 11:27	11380.0	11.129	10.342	25.7	817.3
5/21/2015 12:27	11440.0	11.128	10.343	25.7	817.3
5/21/2015 13:27	11500.0	11.115	10.35	25.7	817.3
5/21/2015 14:27	11560.0	11.124	10.354	25.7	817.3
5/21/2015 15:27	11620.0	11.143	10.343	25.7	817.3
5/21/2015 16:27	11680.0	11.133	10.354	25.7	817.3
5/21/2015 17:27	11740.0	11.134	10.351	25.7	817.3
5/21/2015 18:27	11800.0	11.127	10.353	25.7	817.3
5/21/2015 19:27	11860.0	11.133	10.34	25.7	817.3
5/21/2015 20:27	11920.0	11.125	10.343	25.7	817.3
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5/21/2015 22:27	12040.0	11.12	10.344	25.7	817.3
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5/22/2015 0:27	12160.0	11.118	10.348	25.7	817.3
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5/22/2015 2:27	12280.0	11.117	10.345	25.7	817.3
5/22/2015 3:27	12340.0	11.116	10.354	25.7	817.3
5/22/2015 4:27	12400.0	11.113	10.345	25.7	817.3
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5/22/2015 7:27	12580.0	11.106	10.338	25.6	817.2
5/22/2015 8:27	12640.0	11.101	10.335	25.6	817.2
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5/22/2015 10:27	12760.0	11.097	10.337	25.6	817.2
5/22/2015 11:27	12820.0	11.093	10.346	25.6	817.2
5/22/2015 12:27	12880.0	11.088	10.326	25.6	817.2
5/22/2015 13:27	12940.0	11.102	10.336	25.6	817.2
5/22/2015 14:27	13000.0	11.084	10.331	25.6	817.2
5/22/2015 15:27	13060.0	11.096	10.35	25.6	817.2
5/22/2015 16:27	13120.0	11.09	10.33	25.6	817.2
5/22/2015 17:27	13180.0	11.074	10.336	25.6	817.2
5/22/2015 18:27	13240.0	11.082	10.326	25.6	817.2
5/22/2015 19:27	13300.0	11.091	10.325	25.6	817.2
5/22/2015 20:27	13360.0	11.081	10.335	25.6	817.2
5/22/2015 21:27	13420.0	11.07	10.328	25.6	817.2
5/22/2015 22:27	13480.0	11.064	10.323	25.5	817.1
5/22/2015 23:27	13540.0	11.062	10.324	25.5	817.1
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5/23/2015 1:27	13660.0	11.06	10.325	25.5	817.1
5/23/2015 2:27	13720.0	11.055	10.324	25.5	817.1

5/23/2015 3:27	13780.0	11.054	10.333	25.5	817.1
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5/23/2015 7:27	14020.0	11.04	10.329	25.5	817.1
5/23/2015 8:27	14080.0	11.038	10.324	25.5	817.1
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5/23/2015 13:27	14380.0	11.011	10.333	25.4	817.0
5/23/2015 14:27	14440.0	11.024	10.332	25.5	817.1
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5/23/2015 19:27	14740.0	11.037	10.32	25.5	817.1
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5/23/2015 21:27	14860.0	11.02	10.337	25.4	817.0
5/23/2015 22:27	14920.0	11.016	10.333	25.4	817.0
5/23/2015 23:27	14980.0	11.011	10.322	25.4	817.0
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5/24/2015 5:27	15340.0	11.005	10.329	25.4	817.0
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5/24/2015 10:27	15640.0	10.989	10.317	25.4	817.0
5/24/2015 11:27	15700.0	10.988	10.332	25.4	817.0
5/24/2015 12:27	15760.0	10.972	10.327	25.3	816.9
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5/24/2015 14:27	15880.0	10.98	10.323	25.4	817.0
5/24/2015 15:27	15940.0	11.003	10.31	25.4	817.0
5/24/2015 16:27	16000.0	10.996	10.318	25.4	817.0
5/24/2015 17:27	16060.0	10.995	10.325	25.4	817.0
5/24/2015 18:27	16120.0	10.996	10.324	25.4	817.0
5/24/2015 19:27	16180.0	10.993	10.317	25.4	817.0
5/24/2015 20:27	16240.0	10.985	10.31	25.4	817.0
5/24/2015 21:27	16300.0	10.978	10.32	25.3	817.0
5/24/2015 22:27	16360.0	10.975	10.317	25.3	816.9
5/24/2015 23:27	16420.0	10.973	10.325	25.3	816.9
5/25/2015 0:27	16480.0	10.972	10.334	25.3	816.9
5/25/2015 1:27	16540.0	10.972	10.325	25.3	816.9
5/25/2015 2:27	16600.0	10.97	10.318	25.3	816.9
5/25/2015 3:27	16660.0	10.97	10.319	25.3	816.9
5/25/2015 4:27	16720.0	10.966	10.321	25.3	816.9

5/25/2015 5:27	16780.0	10.964	10.323	25.3	816.9
5/25/2015 6:27	16840.0	10.961	10.318	25.3	816.9
5/25/2015 7:27	16900.0	10.96	10.322	25.3	816.9
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5/25/2015 9:27	17020.0	10.952	10.309	25.3	816.9
5/25/2015 10:27	17080.0	10.949	10.315	25.3	816.9
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5/25/2015 12:27	17200.0	10.936	10.314	25.3	816.9
5/25/2015 13:27	17260.0	10.882	10.311	25.1	816.7
5/25/2015 14:27	17320.0	10.939	10.309	25.3	816.9
5/25/2015 15:27	17380.0	10.97	10.324	25.3	816.9
5/25/2015 16:27	17440.0	10.979	10.323	25.4	817.0
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5/25/2015 18:27	17560.0	10.961	10.312	25.3	816.9
5/25/2015 19:27	17620.0	10.977	10.315	25.3	816.9
5/25/2015 20:27	17680.0	10.955	10.322	25.3	816.9
5/25/2015 21:27	17740.0	10.946	10.331	25.3	816.9
5/25/2015 22:27	17800.0	10.941	10.316	25.3	816.9
5/25/2015 23:27	17860.0	10.941	10.313	25.3	816.9
5/26/2015 0:27	17920.0	10.94	10.311	25.3	816.9
5/26/2015 1:27	17980.0	10.939	10.31	25.3	816.9
5/26/2015 2:27	18040.0	10.937	10.308	25.3	816.9
5/26/2015 3:27	18100.0	10.938	10.309	25.3	816.9
5/26/2015 4:27	18160.0	10.935	10.3	25.3	816.9
5/26/2015 5:27	18220.0	10.931	10.313	25.2	816.8
5/26/2015 6:27	18280.0	10.929	10.302	25.2	816.8
5/26/2015 7:27	18340.0	10.926	10.305	25.2	816.8
5/26/2015 8:27	18400.0	10.923	10.298	25.2	816.8
5/26/2015 9:27	18460.0	10.918	10.314	25.2	816.8
5/26/2015 10:27	18520.0	10.916	10.298	25.2	816.8
5/26/2015 11:27	18580.0	10.913	10.291	25.2	816.8
5/26/2015 12:27	18640.0	10.907	10.305	25.2	816.8
5/26/2015 13:27	18700.0	10.92	10.299	25.2	816.8
5/26/2015 14:27	18760.0	10.816	10.32	25.0	816.6
5/26/2015 15:27	18820.0	10.867	10.313	25.1	816.7
5/26/2015 16:27	18880.0	10.927	10.29	25.2	816.8
5/26/2015 17:27	18940.0	10.942	10.304	25.3	816.9
5/26/2015 18:27	19000.0	10.94	10.308	25.3	816.9
5/26/2015 19:27	19060.0	11.02	10.289	25.4	817.0
5/26/2015 20:27	19120.0	11.058	10.311	25.5	817.1
5/26/2015 21:27	19180.0	11.069	10.301	25.6	817.2
5/26/2015 22:27	19240.0	11.076	10.294	25.6	817.2
5/26/2015 23:27	19300.0	11.077	10.303	25.6	817.2
5/27/2015 0:27	19360.0	11.068	10.291	25.6	817.2
5/27/2015 1:27	19420.0	11.064	10.308	25.5	817.1
5/27/2015 2:27	19480.0	11.057	10.281	25.5	817.1
5/27/2015 3:27	19540.0	11.047	10.287	25.5	817.1
5/27/2015 4:27	19600.0	11.036	10.275	25.5	817.1
5/27/2015 5:27	19660.0	11.03	10.298	25.5	817.1
5/27/2015 6:27	19720.0	11.019	10.303	25.4	817.0

5/27/2015 7:27	19780.0	11	10.27	25.4	817.0
5/27/2015 8:27	19840.0	10.971	10.294	25.3	816.9
5/27/2015 9:27	19900.0	10.942	10.314	25.3	816.9
5/27/2015 10:27	19960.0	10.903	10.293	25.2	816.8
5/27/2015 11:27	20020.0	10.871	10.283	25.1	816.7
5/27/2015 12:27	20080.0	10.85	10.298	25.1	816.7
5/27/2015 13:27	20140.0	10.762	10.298	24.8	816.4
5/27/2015 14:27	20200.0	10.764	10.297	24.9	816.5
5/27/2015 15:27	20260.0	10.798	10.298	24.9	816.5
5/27/2015 16:27	20320.0	10.872	10.293	25.1	816.7
5/27/2015 17:27	20380.0	10.833	10.302	25.0	816.6
5/27/2015 18:27	20440.0	10.891	10.286	25.1	816.7
5/27/2015 19:27	20500.0	10.97	10.293	25.3	816.9
5/27/2015 20:27	20560.0	10.98	10.28	25.4	817.0
5/27/2015 21:27	20620.0	10.991	10.294	25.4	817.0
5/27/2015 22:27	20680.0	10.985	10.303	25.4	817.0
5/27/2015 23:27	20740.0	10.987	10.292	25.4	817.0
5/28/2015 0:27	20800.0	10.983	10.278	25.4	817.0
5/28/2015 1:27	20860.0	10.981	10.293	25.4	817.0
5/28/2015 2:27	20920.0	10.978	10.285	25.3	816.9
5/28/2015 3:27	20980.0	10.968	10.304	25.3	816.9
5/28/2015 4:27	21040.0	10.957	10.294	25.3	816.9
5/28/2015 5:27	21100.0	10.955	10.279	25.3	816.9
5/28/2015 6:27	21160.0	10.962	10.287	25.3	816.9
5/28/2015 7:27	21220.0	10.95	10.278	25.3	816.9
5/28/2015 8:27	21280.0	10.93	10.283	25.2	816.8
5/28/2015 9:27	21340.0	10.913	10.283	25.2	816.8
5/28/2015 10:27	21400.0	10.897	10.287	25.2	816.8
5/28/2015 11:27	21460.0	10.878	10.269	25.1	816.7
5/28/2015 12:27	21520.0	10.84	10.279	25.0	816.6
5/28/2015 13:27	21580.0	10.731	10.291	24.8	816.4
5/28/2015 14:27	21640.0	10.705	10.292	24.7	816.3
5/28/2015 15:27	21700.0	10.728	10.293	24.8	816.4
5/28/2015 16:27	21760.0	10.849	10.298	25.1	816.7
5/28/2015 17:27	21820.0	10.888	10.287	25.1	816.7
5/28/2015 18:27	21880.0	10.805	10.286	24.9	816.5
5/28/2015 19:27	21940.0	10.817	10.277	25.0	816.6
5/28/2015 20:27	22000.0	10.915	10.272	25.2	816.8
5/28/2015 21:27	22060.0	10.958	10.281	25.3	816.9
5/28/2015 22:27	22120.0	10.979	10.295	25.4	817.0
5/28/2015 23:27	22180.0	10.993	10.28	25.4	817.0
5/29/2015 0:27	22240.0	10.993	10.283	25.4	817.0
5/29/2015 1:27	22300.0	10.991	10.294	25.4	817.0
5/29/2015 2:27	22360.0	10.988	10.279	25.4	817.0
5/29/2015 3:27	22420.0	10.983	10.295	25.4	817.0
5/29/2015 4:27	22480.0	10.994	10.277	25.4	817.0
5/29/2015 5:27	22540.0	11.001	10.277	25.4	817.0
5/29/2015 6:27	22600.0	10.993	10.274	25.4	817.0
5/29/2015 7:27	22660.0	10.971	10.291	25.3	816.9
5/29/2015 8:27	22720.0	10.944	10.277	25.3	816.9

5/29/2015 9:27	22780.0	10.912	10.267	25.2	816.8
5/29/2015 10:27	22840.0	10.88	10.265	25.1	816.7
5/29/2015 11:27	22900.0	10.852	10.27	25.1	816.7
5/29/2015 12:27	22960.0	10.797	10.29	24.9	816.5
5/29/2015 13:27	23020.0	10.604	10.283	24.5	816.1
5/29/2015 14:27	23080.0	10.588	10.286	24.4	816.0
5/29/2015 15:27	23140.0	10.679	10.283	24.7	816.3
5/29/2015 16:27	23200.0	10.716	10.285	24.7	816.3
5/29/2015 17:27	23260.0	10.713	10.294	24.7	816.3
5/29/2015 18:27	23320.0	10.744	10.286	24.8	816.4
5/29/2015 19:27	23380.0	10.808	10.29	25.0	816.6
5/29/2015 20:27	23440.0	10.87	10.272	25.1	816.7
5/29/2015 21:27	23500.0	10.9	10.276	25.2	816.8
5/29/2015 22:27	23560.0	10.912	10.276	25.2	816.8
5/29/2015 23:27	23620.0	10.917	10.267	25.2	816.8
5/30/2015 0:27	23680.0	10.912	10.298	25.2	816.8
5/30/2015 1:27	23740.0	10.902	10.275	25.2	816.8
5/30/2015 2:27	23800.0	10.893	10.273	25.2	816.8
5/30/2015 3:27	23860.0	10.886	10.274	25.1	816.7
5/30/2015 4:27	23920.0	10.884	10.273	25.1	816.7
5/30/2015 5:27	23980.0	10.887	10.269	25.1	816.7
5/30/2015 6:27	24040.0	10.872	10.257	25.1	816.7
5/30/2015 7:27	24100.0	10.853	10.274	25.1	816.7
5/30/2015 8:27	24160.0	10.821	10.292	25.0	816.6
5/30/2015 9:27	24220.0	10.796	10.272	24.9	816.5
5/30/2015 10:27	24280.0	10.76	10.281	24.8	816.4
5/30/2015 11:27	24340.0	10.725	10.267	24.8	816.4
5/30/2015 12:27	24400.0	10.66	10.284	24.6	816.2
5/30/2015 13:27	24460.0	10.528	10.271	24.3	815.9
5/30/2015 14:27	24520.0	10.549	10.276	24.4	816.0
5/30/2015 15:27	24580.0	10.588	10.294	24.4	816.0
5/30/2015 16:27	24640.0	10.652	10.292	24.6	816.2
5/30/2015 17:27	24700.0	10.628	10.278	24.5	816.1
5/30/2015 18:27	24760.0	10.607	10.278	24.5	816.1
5/30/2015 19:27	24820.0	10.705	10.286	24.7	816.3
5/30/2015 20:27	24880.0	10.784	10.29	24.9	816.5
5/30/2015 21:27	24940.0	10.807	10.27	25.0	816.6
5/30/2015 22:27	25000.0	10.813	10.272	25.0	816.6
5/30/2015 23:27	25060.0	10.816	10.271	25.0	816.6
5/31/2015 0:27	25120.0	10.811	10.269	25.0	816.6
5/31/2015 1:27	25180.0	10.802	10.268	24.9	816.5
5/31/2015 2:27	25240.0	10.8	10.27	24.9	816.5
5/31/2015 3:27	25300.0	10.797	10.279	24.9	816.5
5/31/2015 4:27	25360.0	10.796	10.289	24.9	816.5
5/31/2015 5:27	25420.0	10.8	10.278	24.9	816.5
5/31/2015 6:27	25480.0	10.79	10.287	24.9	816.5
5/31/2015 7:27	25540.0	10.786	10.262	24.9	816.5
5/31/2015 8:27	25600.0	10.787	10.267	24.9	816.5
5/31/2015 9:27	25660.0	10.759	10.275	24.8	816.4
5/31/2015 10:27	25720.0	10.725	10.266	24.8	816.4



5/31/2015 11:27	25780.0	10.707	10.279	24.7	816.3
5/31/2015 12:27	25840.0	10.697	10.278	24.7	816.3
5/31/2015 13:27	25900.0	10.72	10.278	24.8	816.4
5/31/2015 14:27	25960.0	10.66	10.274	24.6	816.2
5/31/2015 15:27	26020.0	10.669	10.265	24.6	816.2
5/31/2015 16:27	26080.0	10.726	10.247	24.8	816.4
5/31/2015 17:27	26140.0	10.782	10.268	24.9	816.5
5/31/2015 18:27	26200.0	10.825	10.272	25.0	816.6
5/31/2015 19:27	26260.0	10.858	10.256	25.1	816.7
5/31/2015 20:27	26320.0	10.872	10.266	25.1	816.7
5/31/2015 21:27	26380.0	10.886	10.277	25.1	816.7
5/31/2015 22:27	26440.0	10.894	10.269	25.2	816.8
5/31/2015 23:27	26500.0	10.906	10.264	25.2	816.8
6/1/2015 0:27	26560.0	10.907	10.262	25.2	816.8
6/1/2015 1:27	26620.0	10.895	10.263	25.2	816.8
6/1/2015 2:27	26680.0	10.896	10.274	25.2	816.8
6/1/2015 3:27	26740.0	10.891	10.255	25.1	816.7
6/1/2015 4:27	26800.0	10.884	10.256	25.1	816.7
6/1/2015 5:27	26860.0	10.886	10.277	25.1	816.7
6/1/2015 6:27	26920.0	10.889	10.26	25.1	816.7
6/1/2015 7:27	26980.0	10.897	10.27	25.2	816.8
6/1/2015 8:27	27040.0	10.901	10.249	25.2	816.8
6/1/2015 9:27	27100.0	10.881	10.254	25.1	816.7
6/1/2015 10:27	27160.0	10.867	10.277	25.1	816.7
6/1/2015 11:27	27220.0	10.863	10.25	25.1	816.7
6/1/2015 12:27	27280.0	10.86	10.237	25.1	816.7
6/1/2015 13:27	27340.0	10.847	10.256	25.0	816.6
6/1/2015 14:27	27400.0	10.834	10.245	25.0	816.6
6/1/2015 15:27	27460.0	10.821	10.256	25.0	816.6
6/1/2015 16:27	27520.0	10.836	10.262	25.0	816.6
6/1/2015 17:27	27580.0	10.838	10.259	25.0	816.6
6/1/2015 18:27	27640.0	10.839	10.271	25.0	816.6
6/1/2015 19:27	27700.0	10.839	10.249	25.0	816.6
6/1/2015 20:27	27760.0	10.843	10.253	25.0	816.6
6/1/2015 21:27	27820.0	10.849	10.252	25.1	816.7
6/1/2015 22:27	27880.0	10.849	10.253	25.1	816.7
6/1/2015 23:27	27940.0	10.85	10.264	25.1	816.7
6/2/2015 0:27	28000.0	10.843	10.282	25.0	816.6
6/2/2015 1:27	28060.0	10.834	10.249	25.0	816.6
6/2/2015 2:27	28120.0	10.824	10.283	25.0	816.6
6/2/2015 3:27	28180.0	10.815	10.257	25.0	816.6
6/2/2015 4:27	28240.0	10.815	10.254	25.0	816.6
6/2/2015 5:27	28300.0	10.813	10.251	25.0	816.6
6/2/2015 6:27	28360.0	10.812	10.242	25.0	816.6
6/2/2015 7:27	28420.0	10.811	10.25	25.0	816.6
6/2/2015 8:27	28480.0	10.811	10.254	25.0	816.6
6/2/2015 9:27	28540.0	10.826	10.248	25.0	816.6
6/2/2015 10:27	28600.0	10.824	10.244	25.0	816.6
6/2/2015 11:27	28660.0	10.815	10.234	25.0	816.6
6/2/2015 12:27	28720.0	10.818	10.25	25.0	816.6

6/2/2015 13:27	28780.0	10.806	10.253	25.0	816.6
6/2/2015 14:27	28840.0	10.803	10.243	24.9	816.5
6/2/2015 15:27	28900.0	10.802	10.249	24.9	816.5
6/2/2015 16:27	28960.0	10.805	10.251	24.9	816.5
6/2/2015 17:27	29020.0	10.815	10.252	25.0	816.6
6/2/2015 18:27	29080.0	10.824	10.254	25.0	816.6
6/2/2015 19:27	29140.0	10.838	10.243	25.0	816.6
6/2/2015 20:27	29200.0	10.844	10.246	25.0	816.6
6/2/2015 21:27	29260.0	10.851	10.245	25.1	816.7
6/2/2015 22:27	29320.0	10.854	10.247	25.1	816.7
6/2/2015 23:27	29380.0	10.86	10.252	25.1	816.7
6/3/2015 0:27	29440.0	10.858	10.262	25.1	816.7
6/3/2015 1:27	29500.0	10.864	10.244	25.1	816.7
6/3/2015 2:27	29560.0	10.868	10.232	25.1	816.7
6/3/2015 3:27	29620.0	10.885	10.253	25.1	816.7
6/3/2015 4:27	29680.0	10.883	10.246	25.1	816.7
6/3/2015 5:27	29740.0	10.892	10.244	25.1	816.7
6/3/2015 6:27	29800.0	10.899	10.235	25.2	816.8
6/3/2015 7:27	29860.0	10.893	10.251	25.2	816.8
6/3/2015 8:27	29920.0	10.88	10.245	25.1	816.7
6/3/2015 9:27	29980.0	10.846	10.247	25.0	816.6
6/3/2015 10:27	30040.0	10.837	10.246	25.0	816.6
6/3/2015 11:27	30100.0	10.82	10.244	25.0	816.6
6/3/2015 12:27	30160.0	10.786	10.254	24.9	816.5
6/3/2015 13:27	30220.0	10.619	10.258	24.5	816.1
6/3/2015 14:27	30280.0	10.602	10.251	24.5	816.1
6/3/2015 15:27	30340.0	10.672	10.247	24.6	816.2
6/3/2015 16:27	30400.0	10.696	10.246	24.7	816.3
6/3/2015 17:27	30460.0	10.717	10.247	24.7	816.3
6/3/2015 18:27	30520.0	10.706	10.252	24.7	816.3
6/3/2015 19:27	30580.0	10.821	10.241	25.0	816.6
6/3/2015 20:27	30640.0	10.922	10.235	25.2	816.8
6/3/2015 21:27	30700.0	10.964	10.251	25.3	816.9
6/3/2015 22:27	30760.0	10.983	10.237	25.4	817.0
6/3/2015 23:27	30820.0	10.994	10.227	25.4	817.0
6/4/2015 0:27	30880.0	10.998	10.248	25.4	817.0
6/4/2015 1:27	30940.0	11.003	10.243	25.4	817.0
6/4/2015 2:27	31000.0	11.027	10.243	25.5	817.1
6/4/2015 3:27	31060.0	11.041	10.254	25.5	817.1
6/4/2015 4:27	31120.0	11.043	10.237	25.5	817.1
6/4/2015 5:27	31180.0	11.055	10.244	25.5	817.1
6/4/2015 6:27	31240.0	11.057	10.238	25.5	817.1
6/4/2015 7:27	31300.0	11.051	10.229	25.5	817.1
6/4/2015 8:27	31360.0	11.041	10.243	25.5	817.1
6/4/2015 9:27	31420.0	11.004	10.24	25.4	817.0
6/4/2015 10:27	31480.0	10.969	10.231	25.3	816.9
6/4/2015 11:27	31540.0	10.928	10.236	25.2	816.8
6/4/2015 12:27	31600.0	10.907	10.235	25.2	816.8
6/4/2015 13:27	31660.0	10.835	10.223	25.0	816.6
6/4/2015 14:27	31720.0	10.808	10.226	25.0	816.6

6/4/2015 15:27	31780.0	10.873	10.241	25.1	816.7
6/4/2015 16:27	31840.0	10.907	10.235	25.2	816.8
6/4/2015 17:27	31900.0	10.896	10.238	25.2	816.8
6/4/2015 18:27	31960.0	10.967	10.247	25.3	816.9
6/4/2015 19:27	32020.0	11.026	10.243	25.5	817.1
6/4/2015 20:27	32080.0	11.07	10.237	25.6	817.2
6/4/2015 21:27	32140.0	11.091	10.237	25.6	817.2
6/4/2015 22:27	32200.0	11.113	10.243	25.7	817.3
6/4/2015 23:27	32260.0	11.116	10.237	25.7	817.3
6/5/2015 0:27	32320.0	11.12	10.237	25.7	817.3
6/5/2015 1:27	32380.0	11.122	10.235	25.7	817.3
6/5/2015 2:27	32440.0	11.126	10.237	25.7	817.3
6/5/2015 3:27	32500.0	11.124	10.255	25.7	817.3
6/5/2015 4:27	32560.0	11.12	10.233	25.7	817.3
6/5/2015 5:27	32620.0	11.12	10.238	25.7	817.3
6/5/2015 6:27	32680.0	11.125	10.239	25.7	817.3
6/5/2015 7:27	32740.0	11.114	10.226	25.7	817.3
6/5/2015 8:27	32800.0	11.08	10.227	25.6	817.2
6/5/2015 9:27	32860.0	11.061	10.221	25.5	817.1
6/5/2015 10:27	32920.0	11.008	10.231	25.4	817.0
6/5/2015 11:27	32980.0	10.991	10.223	25.4	817.0
6/5/2015 12:27	33040.0	10.932	10.229	25.2	816.8
6/5/2015 13:27	33100.0	10.865	10.236	25.1	816.7
6/5/2015 14:27	33160.0	10.835	10.239	25.0	816.6
6/5/2015 15:27	33220.0	10.885	10.217	25.1	816.7
6/5/2015 16:27	33280.0	10.925	10.216	25.2	816.8
6/5/2015 17:27	33340.0	10.902	10.25	25.2	816.8
6/5/2015 18:27	33400.0	10.934	10.229	25.2	816.8
6/5/2015 19:27	33460.0	11.004	10.24	25.4	817.0
6/5/2015 20:27	33520.0	11.07	10.245	25.6	817.2
6/5/2015 21:27	33580.0	11.099	10.247	25.6	817.2
6/5/2015 22:27	33640.0	11.115	10.229	25.7	817.3
6/5/2015 23:27	33700.0	11.124	10.234	25.7	817.3
6/6/2015 0:27	33760.0	11.13	10.24	25.7	817.3
6/6/2015 1:27	33820.0	11.128	10.227	25.7	817.3
6/6/2015 2:27	33880.0	11.131	10.226	25.7	817.3
6/6/2015 3:27	33940.0	11.13	10.213	25.7	817.3
6/6/2015 4:27	34000.0	11.137	10.229	25.7	817.3
6/6/2015 5:27	34060.0	11.139	10.238	25.7	817.3
6/6/2015 6:27	34120.0	11.132	10.23	25.7	817.3
6/6/2015 7:27	34180.0	11.121	10.219	25.7	817.3
6/6/2015 8:27	34240.0	11.116	10.23	25.7	817.3
6/6/2015 9:27	34300.0	11.117	10.228	25.7	817.3
6/6/2015 10:27	34360.0	11.105	10.215	25.6	817.2
6/6/2015 11:27	34420.0	11.083	10.222	25.6	817.2
6/6/2015 12:27	34480.0	11.114	10.223	25.7	817.3
6/6/2015 13:27	34540.0	11.06	10.227	25.5	817.1
6/6/2015 14:27	34600.0	11.039	10.222	25.5	817.1
6/6/2015 15:27	34660.0	11.047	10.227	25.5	817.1
6/6/2015 16:27	34720.0	11.084	10.226	25.6	817.2

6/6/2015 17:27	34780.0	11.082	10.229	25.6	817.2
6/6/2015 18:27	34840.0	11.038	10.228	25.5	817.1
6/6/2015 19:27	34900.0	11.16	10.22	25.8	817.4
6/6/2015 20:27	34960.0	11.263	10.231	26.0	817.6
6/6/2015 21:27	35020.0	11.311	10.217	26.1	817.7
6/6/2015 22:27	35080.0	11.34	10.219	26.2	817.8
6/6/2015 23:27	35140.0	11.371	10.221	26.3	817.9
6/7/2015 0:27	35200.0	11.386	10.227	26.3	817.9
6/7/2015 1:27	35260.0	11.389	10.218	26.3	817.9
6/7/2015 2:27	35320.0	11.39	10.215	26.3	817.9
6/7/2015 3:27	35380.0	11.394	10.212	26.3	817.9
6/7/2015 4:27	35440.0	11.404	10.237	26.3	817.9
6/7/2015 5:27	35500.0	11.411	10.221	26.3	817.9
6/7/2015 6:27	35560.0	11.406	10.232	26.3	817.9
6/7/2015 7:27	35620.0	11.393	10.223	26.3	817.9
6/7/2015 8:27	35680.0	11.384	10.221	26.3	817.9
6/7/2015 9:27	35740.0	11.361	10.221	26.2	817.8
6/7/2015 10:27	35800.0	11.332	10.227	26.2	817.8
6/7/2015 11:27	35860.0	11.295	10.216	26.1	817.7
6/7/2015 12:27	35920.0	11.247	10.233	26.0	817.6
6/7/2015 13:27	35980.0	11.081	10.216	25.6	817.2
6/7/2015 14:27	36040.0	11.071	10.227	25.6	817.2
6/7/2015 15:27	36100.0	11.137	10.219	25.7	817.3
6/7/2015 16:27	36160.0	11.165	10.206	25.8	817.4
6/7/2015 17:27	36220.0	11.169	10.229	25.8	817.4
6/7/2015 18:27	36280.0	11.113	10.233	25.7	817.3
6/7/2015 19:27	36340.0	11.214	10.214	25.9	817.5
6/7/2015 20:27	36400.0	11.319	10.209	26.1	817.7
6/7/2015 21:27	36460.0	11.348	10.227	26.2	817.8
6/7/2015 22:27	36520.0	11.354	10.221	26.2	817.8
6/7/2015 23:27	36580.0	11.362	10.218	26.2	817.8
6/8/2015 0:27	36640.0	11.369	10.212	26.3	817.9
6/8/2015 1:27	36700.0	11.346	10.238	26.2	817.8
6/8/2015 2:27	36760.0	11.327	10.215	26.2	817.8
6/8/2015 3:27	36820.0	11.321	10.214	26.1	817.7
6/8/2015 4:27	36880.0	11.316	10.215	26.1	817.7
6/8/2015 5:27	36940.0	11.308	10.21	26.1	817.7
6/8/2015 6:27	37000.0	11.307	10.209	26.1	817.7
6/8/2015 7:27	37060.0	11.287	10.217	26.1	817.7
6/8/2015 8:27	37120.0	11.278	10.219	26.0	817.6
6/8/2015 9:27	37180.0	11.252	10.221	26.0	817.6
6/8/2015 10:27	37240.0	11.247	10.237	26.0	817.6
6/8/2015 11:27	37300.0	11.236	10.219	25.9	817.5
6/8/2015 12:27	37360.0	11.197	10.239	25.9	817.5
6/8/2015 13:27	37420.0	11.157	10.213	25.8	817.4
6/8/2015 14:27	37480.0	11.112	10.23	25.7	817.3
6/8/2015 15:27	37540.0	11.113	10.218	25.7	817.3
6/8/2015 16:27	37600.0	11.095	10.223	25.6	817.2
6/8/2015 17:27	37660.0	11.085	10.237	25.6	817.2
6/8/2015 18:27	37720.0	11.111	10.222	25.7	817.3

6/8/2015 19:27	37780.0	11.203	10.219	25.9	817.5
6/8/2015 20:27	37840.0	11.245	10.186	26.0	817.6
6/8/2015 21:27	37900.0	11.265	10.202	26.0	817.6
6/8/2015 22:27	37960.0	11.27	10.206	26.0	817.6
6/8/2015 23:27	38020.0	11.268	10.228	26.0	817.6
6/9/2015 0:27	38080.0	11.272	10.214	26.0	817.6
6/9/2015 1:27	38140.0	11.262	10.221	26.0	817.6
6/9/2015 2:27	38200.0	11.258	10.213	26.0	817.6
6/9/2015 3:27	38260.0	11.256	10.224	26.0	817.6
6/9/2015 4:27	38320.0	11.248	10.242	26.0	817.6
6/9/2015 5:27	38380.0	11.253	10.216	26.0	817.6
6/9/2015 6:27	38440.0	11.251	10.203	26.0	817.6
6/9/2015 7:27	38500.0	11.252	10.202	26.0	817.6
6/9/2015 8:27	38560.0	11.247	10.203	26.0	817.6
6/9/2015 9:27	38620.0	11.237	10.219	25.9	817.5
6/9/2015 10:27	38680.0	11.216	10.226	25.9	817.5
6/9/2015 11:27	38740.0	11.208	10.219	25.9	817.5
6/9/2015 12:27	38800.0	11.163	10.228	25.8	817.4
6/9/2015 13:27	38860.0	11.103	10.215	25.6	817.2
6/9/2015 14:27	38920.0	11.073	10.217	25.6	817.2
6/9/2015 15:27	38980.0	11.093	10.212	25.6	817.2
6/9/2015 16:27	39040.0	11.204	10.203	25.9	817.5
6/9/2015 17:27	39100.0	11.234	10.211	25.9	817.5
6/9/2015 18:27	39160.0	11.153	10.209	25.8	817.4
6/9/2015 19:27	39220.0	11.235	10.216	25.9	817.5
6/9/2015 20:27	39280.0	11.308	10.206	26.1	817.7
6/9/2015 21:27	39340.0	11.345	10.195	26.2	817.8
6/9/2015 22:27	39400.0	11.365	10.189	26.2	817.8
6/9/2015 23:27	39460.0	11.38	10.19	26.3	817.9
6/10/2015 0:27	39520.0	11.382	10.205	26.3	817.9
6/10/2015 1:27	39580.0	11.392	10.207	26.3	817.9
6/10/2015 2:27	39640.0	11.4	10.198	26.3	817.9
6/10/2015 3:27	39700.0	11.406	10.218	26.3	817.9
6/10/2015 4:27	39760.0	11.411	10.206	26.3	818.0
6/10/2015 5:27	39820.0	11.425	10.205	26.4	818.0
6/10/2015 6:27	39880.0	11.424	10.206	26.4	818.0
6/10/2015 7:27	39940.0	11.419	10.204	26.4	818.0
6/10/2015 8:27	40000.0	11.403	10.197	26.3	817.9
6/10/2015 9:27	40060.0	11.381	10.202	26.3	817.9
6/10/2015 10:27	40120.0	11.351	10.209	26.2	817.8
6/10/2015 11:27	40180.0	11.323	10.197	26.1	817.7
6/10/2015 12:27	40240.0	11.276	10.204	26.0	817.6
6/10/2015 13:27	40300.0	11.165	10.208	25.8	817.4
6/10/2015 14:27	40360.0	11.129	10.226	25.7	817.3
6/10/2015 15:27	40420.0	11.184	10.202	25.8	817.4
6/10/2015 16:27	40480.0	11.188	10.204	25.8	817.4
6/10/2015 17:27	40540.0	11.195	10.204	25.9	817.5
6/10/2015 18:27	40600.0	11.157	10.212	25.8	817.4
6/10/2015 19:27	40660.0	11.259	10.201	26.0	817.6
6/10/2015 20:27	40720.0	11.328	10.199	26.2	817.8

6/10/2015 21:27	40780.0	11.363	10.208	26.2	817.8
6/10/2015 22:27	40840.0	11.372	10.195	26.3	817.9
6/10/2015 23:27	40900.0	11.365	10.204	26.2	817.8
6/11/2015 0:27	40960.0	11.379	10.2	26.3	817.9
6/11/2015 1:27	41020.0	11.372	10.212	26.3	817.9
6/11/2015 2:27	41080.0	11.37	10.208	26.3	817.9
6/11/2015 3:27	41140.0	11.373	10.211	26.3	817.9
6/11/2015 4:27	41200.0	11.371	10.201	26.3	817.9
6/11/2015 5:27	41260.0	11.371	10.215	26.3	817.9
6/11/2015 6:27	41320.0	11.371	10.2	26.3	817.9
6/11/2015 7:27	41380.0	11.36	10.209	26.2	817.8
6/11/2015 8:27	41440.0	11.358	10.197	26.2	817.8
6/11/2015 9:27	41500.0	11.336	10.2	26.2	817.8
6/11/2015 10:27	41560.0	11.296	10.219	26.1	817.7
6/11/2015 11:27	41620.0	11.264	10.221	26.0	817.6
6/11/2015 12:27	41680.0	11.22	10.2	25.9	817.5
6/11/2015 13:27	41740.0	11.129	10.198	25.7	817.3
6/11/2015 14:27	41800.0	11.126	10.216	25.7	817.3
6/11/2015 15:27	41860.0	11.162	10.19	25.8	817.4
6/11/2015 16:27	41920.0	11.176	10.197	25.8	817.4
6/11/2015 17:27	41980.0	11.227	10.208	25.9	817.5
6/11/2015 18:27	42040.0	11.235	10.188	25.9	817.5
6/11/2015 19:27	42100.0	11.272	10.208	26.0	817.6
6/11/2015 20:27	42160.0	11.328	10.202	26.2	817.8
6/11/2015 21:27	42220.0	11.353	10.204	26.2	817.8
6/11/2015 22:27	42280.0	11.371	10.206	26.3	817.9
6/11/2015 23:27	42340.0	11.379	10.202	26.3	817.9
6/12/2015 0:27	42400.0	11.391	10.201	26.3	817.9
6/12/2015 1:27	42460.0	11.406	10.199	26.3	817.9
6/12/2015 2:27	42520.0	11.404	10.201	26.3	817.9
6/12/2015 3:27	42580.0	11.413	10.203	26.4	818.0
6/12/2015 4:27	42640.0	11.41	10.196	26.3	817.9
6/12/2015 5:27	42700.0	11.414	10.198	26.4	818.0
6/12/2015 6:27	42760.0	11.411	10.19	26.3	817.9
6/12/2015 7:27	42820.0	11.404	10.208	26.3	817.9
6/12/2015 8:27	42880.0	11.38	10.19	26.3	817.9
6/12/2015 9:27	42940.0	11.357	10.195	26.2	817.8
6/12/2015 10:27	43000.0	11.337	10.183	26.2	817.8
6/12/2015 11:27	43060.0	11.312	10.192	26.1	817.7
6/12/2015 12:27	43120.0	11.272	10.21	26.0	817.6
6/12/2015 13:27	43180.0	11.134	10.207	25.7	817.3
6/12/2015 14:27	43240.0	11.123	10.188	25.7	817.3
6/12/2015 15:27	43300.0	11.165	10.206	25.8	817.4
6/12/2015 16:27	43360.0	11.189	10.2	25.8	817.4
6/12/2015 17:27	43420.0	11.257	10.221	26.0	817.6
6/12/2015 18:27	43480.0	11.213	10.203	25.9	817.5
6/12/2015 19:27	43540.0	11.271	10.197	26.0	817.6
6/12/2015 20:27	43600.0	11.312	10.187	26.1	817.7
6/12/2015 21:27	43660.0	11.328	10.198	26.2	817.8
6/12/2015 22:27	43720.0	11.329	10.2	26.2	817.8

6/12/2015 23:27	43780.0	11.329	10.18	26.2	817.8
6/13/2015 0:27	43840.0	11.321	10.191	26.1	817.7
6/13/2015 1:27	43900.0	11.318	10.203	26.1	817.7
6/13/2015 2:27	43960.0	11.309	10.204	26.1	817.7
6/13/2015 3:27	44020.0	11.316	10.196	26.1	817.7
6/13/2015 4:27	44080.0	11.325	10.195	26.2	817.8
6/13/2015 5:27	44140.0	11.338	10.206	26.2	817.8
6/13/2015 6:27	44200.0	11.347	10.191	26.2	817.8
6/13/2015 7:27	44260.0	11.337	10.197	26.2	817.8
6/13/2015 8:27	44320.0	11.352	10.198	26.2	817.8
6/13/2015 9:27	44380.0	11.352	10.196	26.2	817.8
6/13/2015 10:27	44440.0	11.327	10.185	26.2	817.8
6/13/2015 11:27	44500.0	11.335	10.193	26.2	817.8
6/13/2015 12:27	44560.0	11.314	10.186	26.1	817.7
6/13/2015 13:27	44620.0	11.147	10.185	25.7	817.3
6/13/2015 14:27	44680.0	11.126	10.196	25.7	817.3
6/13/2015 15:27	44740.0	11.204	10.18	25.9	817.5
6/13/2015 16:27	44800.0	11.23	10.186	25.9	817.5
6/13/2015 17:27	44860.0	11.235	10.195	25.9	817.5
6/13/2015 18:27	44920.0	11.237	10.191	25.9	817.5
6/13/2015 19:27	44980.0	11.306	10.195	26.1	817.7
6/13/2015 20:27	45040.0	11.375	10.207	26.3	817.9
6/13/2015 21:27	45100.0	11.407	10.204	26.3	817.9
6/13/2015 22:27	45160.0	11.418	10.194	26.4	818.0
6/13/2015 23:27	45220.0	11.416	10.193	26.4	818.0
6/14/2015 0:27	45280.0	11.429	10.182	26.4	818.0
6/14/2015 1:27	45340.0	11.435	10.178	26.4	818.0
6/14/2015 2:27	45400.0	11.437	10.181	26.4	818.0
6/14/2015 3:27	45460.0	11.418	10.19	26.4	818.0
6/14/2015 4:27	45520.0	11.41	10.196	26.3	817.9
6/14/2015 5:27	45580.0	11.416	10.188	26.4	818.0
6/14/2015 6:27	45640.0	11.424	10.195	26.4	818.0
6/14/2015 7:27	45700.0	11.42	10.195	26.4	818.0
6/14/2015 8:27	45760.0	11.413	10.189	26.4	818.0
6/14/2015 9:27	45820.0	11.389	10.189	26.3	817.9
6/14/2015 10:27	45880.0	11.345	10.188	26.2	817.8
6/14/2015 11:27	45940.0	11.32	10.187	26.1	817.7
6/14/2015 12:27	46000.0	11.261	10.193	26.0	817.6
6/14/2015 13:27	46060.0	11.082	10.183	25.6	817.2
6/14/2015 14:27	46120.0	11.074	10.184	25.6	817.2
6/14/2015 15:27	46180.0	11.194	10.189	25.8	817.4
6/14/2015 16:27	46240.0	11.195	10.191	25.8	817.5
6/14/2015 17:27	46300.0	11.199	10.195	25.9	817.5
6/14/2015 18:27	46360.0	11.205	10.195	25.9	817.5
6/14/2015 19:27	46420.0	11.292	10.176	26.1	817.7
6/14/2015 20:27	46480.0	11.328	10.177	26.2	817.8
6/14/2015 21:27	46540.0	11.343	10.184	26.2	817.8
6/14/2015 22:27	46600.0	11.365	10.18	26.2	817.8
6/14/2015 23:27	46660.0	11.374	10.175	26.3	817.9
6/15/2015 0:27	46720.0	11.374	10.182	26.3	817.9

6/15/2015 1:27	46780.0	11.362	10.204	26.2	817.8
6/15/2015 2:27	46840.0	11.362	10.181	26.2	817.8
6/15/2015 3:27	46900.0	11.355	10.185	26.2	817.8
6/15/2015 4:27	46960.0	11.352	10.188	26.2	817.8
6/15/2015 5:27	47020.0	11.359	10.182	26.2	817.8
6/15/2015 6:27	47080.0	11.344	10.175	26.2	817.8
6/15/2015 7:27	47140.0	11.347	10.168	26.2	817.8
6/15/2015 8:27	47200.0	11.35	10.171	26.2	817.8
6/15/2015 9:27	47260.0	11.346	10.179	26.2	817.8
6/15/2015 10:27	47320.0	11.341	10.193	26.2	817.8
6/15/2015 11:27	47380.0	11.344	10.212	26.2	817.8
6/15/2015 12:27	47440.0	11.336	10.171	26.2	817.8
6/15/2015 13:27	47500.0	11.324	10.188	26.1	817.7
6/15/2015 14:27	47560.0	11.304	10.18	26.1	817.7
6/15/2015 15:27	47620.0	11.298	10.184	26.1	817.7
6/15/2015 16:27	47680.0	11.301	10.186	26.1	817.7
6/15/2015 17:27	47740.0	11.297	10.181	26.1	817.7
6/15/2015 18:27	47800.0	11.301	10.179	26.1	817.7
6/15/2015 19:27	47860.0	11.305	10.179	26.1	817.7
6/15/2015 20:27	47920.0	11.311	10.166	26.1	817.7
6/15/2015 21:27	47980.0	11.317	10.167	26.1	817.7
6/15/2015 22:27	48040.0	11.31	10.182	26.1	817.7
6/15/2015 23:27	48100.0	11.311	10.183	26.1	817.7
6/16/2015 0:27	48160.0	11.3	10.178	26.1	817.7
6/16/2015 1:27	48220.0	11.3	10.2	26.1	817.7
6/16/2015 2:27	48280.0	11.286	10.187	26.1	817.7
6/16/2015 3:27	48340.0	11.28	10.188	26.0	817.6
6/16/2015 4:27	48400.0	11.278	10.184	26.0	817.6
6/16/2015 5:27	48460.0	11.275	10.192	26.0	817.6
6/16/2015 6:27	48520.0	11.276	10.171	26.0	817.6
6/16/2015 7:27	48580.0	11.264	10.198	26.0	817.6
6/16/2015 8:27	48640.0	11.234	10.171	25.9	817.5
6/16/2015 9:27	48700.0	11.222	10.172	25.9	817.5
6/16/2015 10:27	48760.0	11.192	10.19	25.8	817.4
6/16/2015 11:27	48820.0	11.171	10.188	25.8	817.4
6/16/2015 12:27	48880.0	11.153	10.182	25.8	817.4
6/16/2015 13:27	48940.0	11.127	10.181	25.7	817.3
6/16/2015 14:27	49000.0	11.141	10.177	25.7	817.3
6/16/2015 15:27	49060.0	11.103	10.191	25.6	817.2
6/16/2015 16:27	49120.0	11.076	10.171	25.6	817.2
6/16/2015 17:27	49180.0	11.135	10.173	25.7	817.3
6/16/2015 18:27	49240.0	11.1	10.169	25.6	817.2
6/16/2015 19:27	49300.0	11.149	10.163	25.7	817.3
6/16/2015 20:27	49360.0	11.193	10.172	25.8	817.4
6/16/2015 21:27	49420.0	11.234	10.183	25.9	817.5
6/16/2015 22:27	49480.0	11.251	10.18	26.0	817.6
6/16/2015 23:27	49540.0	11.265	10.17	26.0	817.6
6/17/2015 0:27	49600.0	11.272	10.168	26.0	817.6
6/17/2015 1:27	49660.0	11.283	10.171	26.1	817.7
6/17/2015 2:27	49720.0	11.293	10.173	26.1	817.7



6/17/2015 3:27	49780.0	11.315	10.167	26.1	817.7
6/17/2015 4:27	49840.0	11.335	10.171	26.2	817.8
6/17/2015 5:27	49900.0	11.348	10.17	26.2	817.8
6/17/2015 6:27	49960.0	11.36	10.169	26.2	817.8
6/17/2015 7:27	50020.0	11.353	10.165	26.2	817.8
6/17/2015 8:27	50080.0	11.353	10.165	26.2	817.8
6/17/2015 9:27	50140.0	11.338	10.158	26.2	817.8
6/17/2015 10:27	50200.0	11.333	10.172	26.2	817.8
6/17/2015 11:27	50260.0	11.327	10.167	26.2	817.8
6/17/2015 12:27	50320.0	11.279	10.168	26.0	817.6
6/17/2015 13:27	50380.0	11.157	10.167	25.8	817.4
6/17/2015 14:27	50440.0	11.117	10.173	25.7	817.3
6/17/2015 15:27	50500.0	11.173	10.174	25.8	817.4
6/17/2015 16:27	50560.0	11.235	10.176	25.9	817.5
6/17/2015 17:27	50620.0	11.267	10.168	26.0	817.6
6/17/2015 18:27	50680.0	11.306	10.181	26.1	817.7
6/17/2015 19:27	50740.0	11.346	10.177	26.2	817.8
6/17/2015 20:27	50800.0	11.365	10.164	26.2	817.8
6/17/2015 21:27	50860.0	11.382	10.174	26.3	817.9
6/17/2015 22:27	50920.0	11.397	10.167	26.3	817.9
6/17/2015 23:27	50980.0	11.408	10.17	26.3	817.9
6/18/2015 0:27	51040.0	11.409	10.173	26.3	817.9
6/18/2015 1:27	51100.0	11.401	10.186	26.3	817.9
6/18/2015 2:27	51160.0	11.394	10.173	26.3	817.9
6/18/2015 3:27	51220.0	11.395	10.17	26.3	817.9
6/18/2015 4:27	51280.0	11.391	10.174	26.3	817.9
6/18/2015 5:27	51340.0	11.392	10.178	26.3	817.9
6/18/2015 6:27	51400.0	11.387	10.179	26.3	817.9
6/18/2015 7:27	51460.0	11.377	10.164	26.3	817.9
6/18/2015 8:27	51520.0	11.356	10.169	26.2	817.8
6/18/2015 9:27	51580.0	11.327	10.173	26.2	817.8
6/18/2015 10:27	51640.0	11.298	10.165	26.1	817.7
6/18/2015 11:27	51700.0	11.265	10.168	26.0	817.6
6/18/2015 12:27	51760.0	11.223	10.17	25.9	817.5
6/18/2015 13:27	51820.0	11.181	10.185	25.8	817.4
6/18/2015 14:27	51880.0	11.174	10.166	25.8	817.4
6/18/2015 15:27	51940.0	11.227	10.179	25.9	817.5
6/18/2015 16:27	52000.0	11.252	10.171	26.0	817.6
6/18/2015 17:27	52060.0	11.261	10.169	26.0	817.6
6/18/2015 18:27	52120.0	11.28	10.161	26.0	817.6
6/18/2015 19:27	52180.0	11.306	10.172	26.1	817.7
6/18/2015 20:27	52240.0	11.324	10.171	26.1	817.7
6/18/2015 21:27	52300.0	11.34	10.164	26.2	817.8
6/18/2015 22:27	52360.0	11.349	10.167	26.2	817.8
6/18/2015 23:27	52420.0	11.356	10.169	26.2	817.8
6/19/2015 0:27	52480.0	11.353	10.169	26.2	817.8
6/19/2015 1:27	52540.0	11.355	10.18	26.2	817.8
6/19/2015 2:27	52600.0	11.347	10.162	26.2	817.8
6/19/2015 3:27	52660.0	11.342	10.173	26.2	817.8
6/19/2015 4:27	52720.0	11.341	10.172	26.2	817.8

6/19/2015 5:27	52780.0	11.34	10.16	26.2	817.8
6/19/2015 6:27	52840.0	11.336	10.182	26.2	817.8
6/19/2015 7:27	52900.0	11.323	10.164	26.1	817.7
6/19/2015 8:27	52960.0	11.302	10.16	26.1	817.7
6/19/2015 9:27	53020.0	11.286	10.184	26.1	817.7
6/19/2015 10:27	53080.0	11.269	10.18	26.0	817.6
6/19/2015 11:27	53140.0	11.241	10.163	26.0	817.6
6/19/2015 12:27	53200.0	11.227	10.156	25.9	817.5
6/19/2015 13:27	53260.0	11.188	10.16	25.8	817.4
6/19/2015 14:27	53320.0	11.198	10.163	25.9	817.5
6/19/2015 15:27	53380.0	11.207	10.165	25.9	817.5
6/19/2015 16:27	53440.0	11.236	10.158	25.9	817.5
6/19/2015 17:27	53500.0	11.231	10.158	25.9	817.5
6/19/2015 18:27	53560.0	11.22	10.159	25.9	817.5
6/19/2015 19:27	53620.0	11.298	10.17	26.1	817.7
6/19/2015 20:27	53680.0	11.363	10.171	26.2	817.8
6/19/2015 21:27	53740.0	11.397	10.159	26.3	817.9
6/19/2015 22:27	53800.0	11.428	10.16	26.4	818.0
6/19/2015 23:27	53860.0	11.445	10.149	26.4	818.0
6/20/2015 0:27	53920.0	11.458	10.159	26.5	818.1
6/20/2015 1:27	53980.0	11.468	10.163	26.5	818.1
6/20/2015 2:27	54040.0	11.483	10.161	26.5	818.1
6/20/2015 3:27	54100.0	11.495	10.165	26.5	818.1
6/20/2015 4:27	54160.0	11.505	10.167	26.6	818.2
6/20/2015 5:27	54220.0	11.514	10.164	26.6	818.2
6/20/2015 6:27	54280.0	11.51	10.15	26.6	818.2
6/20/2015 7:27	54340.0	11.497	10.164	26.5	818.1
6/20/2015 8:27	54400.0	11.484	10.161	26.5	818.1
6/20/2015 9:27	54460.0	11.456	10.156	26.5	818.1
6/20/2015 10:27	54520.0	11.421	10.164	26.4	818.0
6/20/2015 11:27	54580.0	11.4	10.164	26.3	817.9
6/20/2015 12:27	54640.0	11.399	10.16	26.3	817.9
6/20/2015 13:27	54700.0	11.421	10.156	26.4	818.0
6/20/2015 14:27	54760.0	11.434	10.159	26.4	818.0
6/20/2015 15:27	54820.0	11.448	10.169	26.4	818.0
6/20/2015 16:27	54880.0	11.451	10.16	26.4	818.0
6/20/2015 17:27	54940.0	11.451	10.146	26.4	818.0
6/20/2015 18:27	55000.0	11.452	10.156	26.4	818.0
6/20/2015 19:27	55060.0	11.451	10.154	26.4	818.0
6/20/2015 20:27	55120.0	11.442	10.157	26.4	818.0
6/20/2015 21:27	55180.0	11.436	10.157	26.4	818.0
6/20/2015 22:27	55240.0	11.429	10.157	26.4	818.0
6/20/2015 23:27	55300.0	11.413	10.16	26.4	818.0
6/21/2015 0:27	55360.0	11.395	10.159	26.3	817.9
6/21/2015 1:27	55420.0	11.37	10.16	26.3	817.9
6/21/2015 2:27	55480.0	11.364	10.163	26.2	817.8
6/21/2015 3:27	55540.0	11.355	10.165	26.2	817.8
6/21/2015 4:27	55600.0	11.329	10.159	26.2	817.8
6/21/2015 5:27	55660.0	11.322	10.163	26.1	817.7
6/21/2015 6:27	55720.0	11.309	10.164	26.1	817.7

6/21/2015 7:27	55780.0	11.303	10.166	26.1	817.7
6/21/2015 8:27	55840.0	11.302	10.157	26.1	817.7
6/21/2015 9:27	55900.0	11.293	10.166	26.1	817.7
6/21/2015 10:27	55960.0	11.279	10.169	26.0	817.6
6/21/2015 11:27	56020.0	11.262	10.165	26.0	817.6
6/21/2015 12:27	56080.0	11.231	10.154	25.9	817.5
6/21/2015 13:27	56140.0	11.187	10.171	25.8	817.4
6/21/2015 14:27	56200.0	11.185	10.155	25.8	817.4
6/21/2015 15:27	56260.0	11.206	10.161	25.9	817.5
6/21/2015 16:27	56320.0	11.192	10.158	25.8	817.4
6/21/2015 17:27	56380.0	11.231	10.147	25.9	817.5
6/21/2015 18:27	56440.0	11.263	10.155	26.0	817.6
6/21/2015 19:27	56500.0	11.349	10.158	26.2	817.8
6/21/2015 20:27	56560.0	11.377	10.161	26.3	817.9
6/21/2015 21:27	56620.0	11.406	10.156	26.3	817.9
6/21/2015 22:27	56680.0	11.417	10.15	26.4	818.0
6/21/2015 23:27	56740.0	11.427	10.148	26.4	818.0
6/22/2015 0:27	56800.0	11.435	10.157	26.4	818.0
6/22/2015 1:27	56860.0	11.441	10.154	26.4	818.0
6/22/2015 2:27	56920.0	11.446	10.157	26.4	818.0
6/22/2015 3:27	56980.0	11.455	10.155	26.5	818.1
6/22/2015 4:27	57040.0	11.462	10.152	26.5	818.1
6/22/2015 5:27	57100.0	11.474	10.143	26.5	818.1
6/22/2015 6:27	57160.0	11.486	10.154	26.5	818.1
6/22/2015 7:27	57220.0	11.485	10.156	26.5	818.1
6/22/2015 8:27	57280.0	11.48	10.166	26.5	818.1
6/22/2015 9:27	57340.0	11.472	10.151	26.5	818.1
6/22/2015 10:27	57400.0	11.445	10.152	26.4	818.0
6/22/2015 11:27	57460.0	11.42	10.148	26.4	818.0
6/22/2015 12:27	57520.0	11.39	10.148	26.3	817.9

# **Appendix 2**

## **Boring Logs**

- DM Series performed by General Borings, Inc. in April 29, 30 - May 1, 2015



# BORING LOG

Project Name  
**CPV Towantic Energy Center  
Oxford, CT**

Boring No.: **DM-1**  
Page No.: **1 of 2**  
File No.: **3773-001.00**  
Checked By: **TvR**

Boring Company: General Borings, Inc.  
Foreman: John Wyant & Paul Calabris  
GeoDesign Rep.: Chris Lane  
Date Started: May 1, 2015 Date Finished: May 1, 2015  
N. Coordinate: \_\_\_\_\_ E. Coordinate: \_\_\_\_\_  
Ground Surface Elevation (feet): \_\_\_\_\_  
Station: \_\_\_\_\_ Offset: \_\_\_\_\_ ft

Type:	Casing:	Sampler:	Groundwater Observations			
	H.S.A.	SS	Date	Depth (ft)	Elev. (ft)	Notes
I.D.:	3.25 in.	1.38 in.				
Hammer Wt.:	N/A	140 lbs	5/1/15	12.8		at 50 B
Hammer Fall:	N/A	30 in.				
Rig Type:	Track Diedrich D-50					
Hammer Type:	Safety - Hydraulic					

Depth (ft)	Sample Information										Strata Description	Symbol	Sample Description	
	Casing Blows/ft		Penetration (inches)	Recovery (inches)	Depth (ft)	Blows / 6 inch Interval				Coring Time (min./ft)				Moisture Content (%)
	Number	Type				0 - 6	6 - 12	12 - 18	18 - 24					
	1	SS	24	13	0.0	1	3	2	3			Topsoil Glacial Till	Loose, brown fine to medium SAND, little Silt, trace fine Gravel, trace Roots (moist)	
5														
10	2	SS	5	4	10.0	50/5"	-	-	-				Dense, brown fine to medium SAND, little fine Gravel, little Silt, (wet)	
15														
20	3	SS	24	24	20.0	16	24	28	38				Very dense, gray/brown fine to coarse SAND, little fine to coarse Gravel, little Silt, (wet)	
25														
30														

- Remarks
- 1.) Auger refusal at 11'. Moved boring 4' west.
  - 2.) Lots of boulders/cobbles at surface and from 0-3' (chatter).
  - 3.) Well at

Notes: 1) Stratification lines represent approximate boundary between material types, transitions may be gradual.  
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made. AC = After coring; NR = Not Recorded.  
3) Abbreviations: A = Auger; C = Core; MC=Macrocore; D = Driven; G = Grab; PS = Piston Sample; SS = Split Spoon; SSL = 3.5 Inch ID Split Spoon; ST = Shelby Tube; V = Vane; WOR/H = Weight of Rod/Hammer  
4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%

Boring No.: **DM-1**

1 - BORING LOG MC 2008-2009 3773-001.00 BORING LOGS.GPJ GEODESIGN STANDARD.GDT 7/8/15



# BORING LOG

Boring No.: **DM-1**  
 Page No.: **2 of 2**  
 File No.: **3773-001.00**  
 Checked By: **TvR**

Project Name  
**CPV Towantic Energy Center  
 Oxford, CT**

Boring Company: General Borings, Inc.  
 Foreman: John Wyant & Paul Calabris  
 GeoDesign Rep.: Chris Lane  
 Date Started: May 1, 2015 Date Finished: May 1, 2015  
 N. Coordinate: \_\_\_\_\_ E. Coordinate: \_\_\_\_\_  
 Ground Surface Elevation (feet): \_\_\_\_\_  
 Station: \_\_\_\_\_ Offset: \_\_\_\_\_ ft

Casing:		Sampler:		Groundwater Observations			
Type:	H.S.A.	SS	Date	Depth (ft)	Elev. (ft)	Notes	
I.D.:	3.25 in.	1.38 in.					
Hammer Wt.:	N/A	140 lbs	5/1/15	12.8		at 50 B	
Hammer Fall:	N/A	30 in.					
Rig Type:	Track Diedrich D-50						
Hammer Type:	Safety - Hydraulic						

Depth (ft)	Sample Information										Strata Description	Symbol	Sample Description	
	Casing Blows/ft		Penetration (inches)	Recovery (inches)	Depth (ft)	Blows / 6 inch Interval				Coring Time (min./ft)				Moisture Content (%)
	Number	Type				0 - 6	6 - 12	12 - 18	18 - 24					
	4	SS	24	13	30.0	13	28	40	50/5'			Glacial Till (Continued)	Classification System: Modified Burmister Very dense, green/gray fine to coarse SAND, some fine to coarse Gravel, little Silt (wet)	
												31.9		
35														
40														
45														
50														
55														
60														
Remarks														

Notes: 1) Stratification lines represent approximate boundary between material types, transitions may be gradual.  
 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made. AC = After coring; NR = Not Recorded.  
 3) Abbreviations: A = Auger; C = Core; MC=Macrocore; D = Driven; G = Grab; PS = Piston Sample; SS = Split Spoon; SSL = 3.5 Inch ID Split Spoon; ST = Shelby Tube; V = Vane; WOR/H = Weight of Rod/Hammer  
 4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%

Boring No.: **DM-1**



# BORING LOG

Project Name  
**CPV Towantic Energy Center  
Oxford, CT**

Boring No.: **DM-2**  
Page No.: **1 of 2**  
File No.: **3773-001.00**  
Checked By: **TvR**

Boring Company: General Borings, Inc.  
Foreman: John Wyant & Paul Calabris  
GeoDesign Rep.: Chris Lane  
Date Started: April 30, 2015 Date Finished: May 1, 2015  
N. Coordinate: \_\_\_\_\_ E. Coordinate: \_\_\_\_\_  
Ground Surface Elevation (feet): \_\_\_\_\_  
Station: \_\_\_\_\_ Offset: \_\_\_\_\_ ft

Type:	Casing:	Sampler:	Groundwater Observations			
	H.S.A.	SS	Date	Depth (ft)	Elev. (ft)	Notes
I.D.:	3.25 in.	1.38 in.				
Hammer Wt.:	N/A	140 lbs	5/1/15	16.0		
Hammer Fall:	N/A	30 in.				
Rig Type:	Track Diedrich D-50					
Hammer Type:	Safety - Hydraulic					

Depth (ft)	Sample Information										Strata Description	Symbol	Sample Description	Well Log	
	Casing Blows/ft		Penetration (inches)	Recovery (inches)	Depth (ft)	Blows / 6 inch Interval				Coring Time (min./ft)					Moisture Content (%)
	Number	Type				0 - 6	6 - 12	12 - 18	18 - 24						
	1	SS	24	9	0.0	2	6	7	3			Topsoil Glacial Till	Medium dense, brown fine to coarse SAND and Clayey SILT, trace fine Gravel and Roots, wet		
5	2	SS	24	17	5.0	9	14	13	15				Medium dense, brown/gray fine to coarse SAND, some fine to coarse Gravel, little Silt, moist		
10	3	SS	23	22	10.0	13	17	32	50/5"				Very dense, brown/gray fine to coarse SAND and fine to coarse GRAVEL, little Silt, moist		
15	4	SS	24	21	15.0	10	17	20	33				Dense, brown/gray fine to coarse SAND and fine to coarse GRAVEL, little Silt, moist		
20	5	SS	22	22	20.0	14	32	35	50/4"				Very dense, brown/gray fine to coarse SAND and fine GRAVEL, some Silt, moist		
25	6	SS	24	13	25.0	14	24	35	49				Very dense, brown/green fine to coarse SAND, some fine to coarse Gravel, some Silt, moist		
30															

Remarks  
1.) Well installed at 41-foot depth, 2-inch diameter, 2-foot protective casing and locking lid, and a cement slab.  
2.) Screen from 41' to 31', sand from 41' to 29', 1' of bentonite from 29-28', cuttings from 28 to 0'.

Notes: 1) Stratification lines represent approximate boundary between material types, transitions may be gradual.  
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made. AC = After coring; NR = Not Recorded.  
3) Abbreviations: A = Auger; C = Core; MC=Macrocore; D = Driven; G = Grab; PS = Piston Sample; SS = Split Spoon; SSL = 3.5 Inch ID Split Spoon; ST = Shelby Tube; V = Vane; WOR/H = Weight of Rod/Hammer  
4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%

Boring No.: **DM-2**

1 - BORING LOG MC 2008-2009 3773-001.00 BORING LOGS.GPJ - GEODESIGN STANDARD.GDT 7/8/15



# BORING LOG

Project Name  
**CPV Towantic Energy Center  
Oxford, CT**

Boring No.: **DM-2**  
Page No.: **2 of 2**  
File No.: **3773-001.00**  
Checked By: **TvR**

Boring Company: General Borings, Inc.  
Foreman: John Wyant & Paul Calabris  
GeoDesign Rep.: Chris Lane  
Date Started: April 30, 2015 Date Finished: May 1, 2015  
N. Coordinate: \_\_\_\_\_ E. Coordinate: \_\_\_\_\_  
Ground Surface Elevation (feet): \_\_\_\_\_  
Station: \_\_\_\_\_ Offset: \_\_\_\_\_ ft

Type:	Casing:	Sampler:	Groundwater Observations			
	H.S.A.	SS	Date	Depth (ft)	Elev. (ft)	Notes
I.D.:	3.25 in.	1.38 in.				
Hammer Wt.:	N/A	140 lbs	5/1/15	16.0		
Hammer Fall:	N/A	30 in.				
Rig Type:	Track Diedrich D-50					
Hammer Type:	Safety - Hydraulic					

Depth (ft)	Sample Information										Strata Description	Symbol	Sample Description	Well Log		
	Casing Blows/ft		Penetration (inches)	Recovery (inches)	Depth (ft)	Blows / 6 inch Interval				Coring Time (min./ft)					Moisture Content (%)	
	Number	Type				0 - 6	6 - 12	12 - 18	18 - 24							
	7	SS	22	22	30.0	11	25	28	50/4"			Glacial Till (Continued)	Very dense, green fine to coarse SAND and fine to coarse GRAVEL, some Silt, moist			
35																
	8	SS	14	14	35.0	15	37	50/5"	-							Very dense, green fine to coarse SAND and fine to coarse GRAVEL, some Silt, moist
40																
	9	SS	5	5	40.0	50/5"	-	-	-			41.0	Very dense, green fine to coarse SAND, some fine to coarse Gravel, some Silt, wet			
												Bottom of Exploration at 41.0 ft				
45																
50																
55																
60																

Remarks

Notes: 1) Stratification lines represent approximate boundary between material types, transitions may be gradual.  
2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made. AC = After coring; NR = Not Recorded.  
3) Abbreviations: A = Auger; C = Core; MC=Macrocore; D = Driven; G = Grab; PS = Piston Sample; SS = Split Spoon; SSL = 3.5 Inch ID Split Spoon; ST = Shelby Tube; V = Vane; WOR/H = Weight of Rod/Hammer  
4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%

Boring No.: **DM-2**





# BORING LOG

Boring No.: **DM-3**  
 Page No.: **1 of 2**  
 File No.: **3773-001.00**  
 Checked By: **TvR**

Project Name  
**CPV Towantic Energy Center  
 Oxford, CT**

Boring Company: General Borings, Inc.  
 Foreman: John Wyant & Paul Calabris  
 GeoDesign Rep.: Chris Lane  
 Date Started: April 30, 2015 Date Finished: April 30, 2015  
 N. Coordinate: \_\_\_\_\_ E. Coordinate: \_\_\_\_\_  
 Ground Surface Elevation (feet): \_\_\_\_\_  
 Station: \_\_\_\_\_ Offset: \_\_\_\_\_ ft

Type:	Casing:	Sampler:	Groundwater Observations			
	H.S.A.	SS	Date	Depth (ft)	Elev. (ft)	Notes
I.D.:	3.25 in.	1.38 in.				
Hammer Wt.:	N/A	140 lbs	5/1/15	18.5		Taped
Hammer Fall:	N/A	30 in.				
Rig Type:	Track Diedrich D-50					
Hammer Type:	Safety - Hydraulic					

Depth (ft)	Sample Information										Strata Description	Symbol	Sample Description	
	Casing Blows/ft		Penetration (inches)	Recovery (inches)	Depth (ft)	Blows / 6 inch Interval				Coring Time (min./ft)				Moisture Content (%)
	Number	Type				0 - 6	6 - 12	12 - 18	18 - 24					
	1	SS	24	10	0.0	3	1	2	2			Topsoil Till	Very loose, brown fine to coarse SAND, some Silt, little fine Gravel, trace Roots, moist	
	2	SS	24	13	2.0	8	10	19	24				Medium dense, brown fine to coarse SAND, some Silt, little fine to coarse Gravel, moist	
5	3	SS	24	8	5.0	14	16	19	23				Dense, brown fine to coarse SAND, some Silt/Clay, trace fine Gravel, moist	
10	4	SS	24	19	10.0	7	18	20	24				Dense, brown fine to coarse SAND, some Silt, little fine Gravel, moist	
15	5	SS	24	20	15.0	19	30	34	40				Very dense, brown fine to coarse SAND, little fine Gravel, little Silt, moist	
20	6	SS	24	0	20.0	30	37	37	35				No Recovery	
25	7	SS	11	4	25.0	31	50/5"						Very dense, brown/gray fine to coarse SAND, little fine Gravel, little Silt, moist	
30														

Remarks  
 1.) Auger chatter at 15-20.  
 2.) Well 35'.  
 3.) Screen from 25-35', Sand from 23-35', bentonite from 22-23', cuttings from 0-22'.

Notes: 1) Stratification lines represent approximate boundary between material types, transitions may be gradual.  
 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made. AC = After coring; NR = Not Recorded.  
 3) Abbreviations: A = Auger; C = Core; MC=Macrocore; D = Driven; G = Grab; PS = Piston Sample; SS = Split Spoon; SSL = 3.5 Inch ID Split Spoon; ST = Shelby Tube; V = Vane; WOR/H = Weight of Rod/Hammer  
 4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%

Boring No.: **DM-3**

1 - BORING LOG MC 2008-2009 3773-001.00 BORING LOGS.GPJ GEODESIGN STANDARD.GDT 7/8/15



# BORING LOG

Project Name  
**CPV Towantic Energy Center  
Oxford, CT**

Boring No.: **DM-3**  
Page No.: **2 of 2**  
File No.: **3773-001.00**  
Checked By: **TvR**

Boring Company: General Borings, Inc.  
Foreman: John Wyant & Paul Calabris  
GeoDesign Rep.: Chris Lane  
Date Started: April 30, 2015 Date Finished: April 30, 2015  
N. Coordinate: \_\_\_\_\_ E. Coordinate: \_\_\_\_\_  
Ground Surface Elevation (feet): \_\_\_\_\_  
Station: \_\_\_\_\_ Offset: \_\_\_\_\_ ft

Casing:		Sampler:		Groundwater Observations			
Type:	H.S.A.	SS	Date	Depth (ft)	Elev. (ft)	Notes	
I.D.:	3.25 in.	1.38 in.					
Hammer Wt.:	N/A	140 lbs	5/1/15	18.5		Taped	
Hammer Fall:	N/A	30 in.					
Rig Type:	Track Diedrich D-50						
Hammer Type:	Safety - Hydraulic						

Depth (ft)	Sample Information										Strata Description	Symbol	Sample Description	
	Casing Blows/ft		Penetration (inches)	Recovery (inches)	Depth (ft)	Blows / 6 inch Interval				Coring Time (min./ft)				Moisture Content (%)
	Number	Type				0 - 6	6 - 12	12 - 18	18 - 24					
	8	SS	24	22	30.0	9	22	28	40			Till (Continued)	Classification System: Modified Burmister Very dense, brown/green SILT and fine to medium SAND, trace fine Gravel, moist	
35	9	SS	24	24	35.0	11	19	31	36					Very dense, brown/green fine to coarse SAND, some fine to coarse Gravel, little Silt, moist
												37.0	Bottom of Exploration at 37.0 ft	
40														
45														
50														
55														
60														

Remarks

Notes: 1) Stratification lines represent approximate boundary between material types, transitions may be gradual.  
 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made. AC = After coring; NR = Not Recorded.  
 3) Abbreviations: A = Auger; C = Core; MC=Macrocore; D = Driven; G = Grab; PS = Piston Sample; SS = Split Spoon; SSL = 3.5 Inch ID Split Spoon; ST = Shelby Tube; V = Vane; WOR/H = Weight of Rod/Hammer  
 4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%

Boring No.: **DM-3**

**BORING LOG**

Boring No.: **DM-4**  
 Page No.: **1 of 2**  
 File No.: **3773-001.00**  
 Checked By: **TvR**

Project Name  
**CPV Towantic Energy Center  
 Oxford, CT**

Boring Company: General Borings, Inc.  
 Foreman: John Wyant & Paul Calabris  
 GeoDesign Rep.: Hasian Zapata & Ted von Rosenvinge  
 Date Started: April 29, 2015 Date Finished: April 29, 2015  
 N. Coordinate: \_\_\_\_\_ E. Coordinate: \_\_\_\_\_  
 Ground Surface Elevation (feet): \_\_\_\_\_  
 Station: \_\_\_\_\_ Offset: \_\_\_\_\_ ft

Type:	Casing:	Sampler:	Groundwater Observations			
	H.S.A.	SS	Date	Depth (ft)	Elev. (ft)	Notes
I.D.:	3.25 in.	1.38 in.				
Hammer Wt.:	N/A	140 lbs	4/29/15	35.0		Wet sample
Hammer Fall:	N/A	30 in.	4/30/15	26.1		Taped
Rig Type:	Track Diedrich D-50		5/1/15			
Hammer Type:	Safety - Hydraulic					

Depth (ft)	Sample Information										Strata Description	Symbol	Sample Description	Well Log	
	Casing Blows/ft		Penetration (inches)	Recovery (inches)	Depth (ft)	Blows / 6 inch Interval				Coring Time (min./ft)					Moisture Content (%)
	Number	Type				0 - 6	6 - 12	12 - 18	18 - 24						
	1	SS	24	12	0.0	3	3	4	6			Topsoil Glacial Till	Classification System: Modified Burmister  Top 4": TOPSOIL Bottom 8": Loose, light brown fine to medium SAND (moist)  Piece of GRAVEL   Very dense, brown fine to coarse SAND, little Clayey Silt, trace fine to coarse Gravel, trace Organic Fibers, moist   Dense, brown fine to coarse SAND, little Clayey Silt, trace fine to coarse Gravel, trace Organic Fibers, moist   Very dense, brown fine to medium SAND, little Clayey Silt, trace fine to coarse Gravel, (Weathered Rock), moist   Very dense, greenish brown fine to medium SAND, little Clayey Silt, trace fine to coarse Gravel, moist   Very dense, dark green-brown fine to medium SAND and SILT, trace fine Gravel, moist		
	2	SS	24	3	2.0	34	25	31	29						
5	3	SS	21	15	5.0	15	17	46	50/3"						
10	4	SS	24	24	10.0	14	18	20	25						
15	5	SS	24	15	15.0	8	21	39	39						
20	6	SS	24	22	20.0	10	19	35	41						
25	7	SS	24	15	25.0	15	30	38	43						
30															

Remarks

- 1.) Piece of gravel stuck in tip of spoon.
- 2.) Auger chatter from 36-38 ft.
- 3.) Well installed at 37-foot depth, 2-inch diameter, 2-foot protective casing and locking lid, and a cement slab.
- 2.) Screen from 37' to 27', sand from 37' to 28', 1' of bentonite from 28'-27', cuttings from 27' to 0'.

Notes:

- 1) Stratification lines represent approximate boundary between material types, transitions may be gradual.
- 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made. AC = After coring; NR = Not Recorded.
- 3) Abbreviations: A = Auger; C = Core; MC=Macrocore; D = Driven; G = Grab; PS = Piston Sample; SS = Split Spoon; SSL = 3.5 Inch ID Split Spoon; ST = Shelby Tube; V = Vane; WOR/H = Weight of Rod/Hammer
- 4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%

1 - BORING LOG MC 2008-2009 3773-001.00 BORING LOGS.GPJ GEODESIGN STANDARD.GDT 7/8/15



# BORING LOG

Project Name  
**CPV Towantic Energy Center  
Oxford, CT**

Boring No.: **DM-4**  
Page No.: **2 of 2**  
File No.: **3773-001.00**  
Checked By: **TvR**

Boring Company: General Borings, Inc.  
Foreman: John Wyant & Paul Calabris  
GeoDesign Rep.: Hasian Zapata & Ted von Roseninge  
Date Started: April 29, 2015 Date Finished: April 29, 2015  
N. Coordinate: \_\_\_\_\_ E. Coordinate: \_\_\_\_\_  
Ground Surface Elevation (feet): \_\_\_\_\_  
Station: \_\_\_\_\_ Offset: \_\_\_\_\_ ft

Type:	Casing:	Sampler:	Groundwater Observations			
	H.S.A.	SS	Date	Depth (ft)	Elev. (ft)	Notes
I.D.:	3.25 in.	1.38 in.				
Hammer Wt.:	N/A	140 lbs	4/29/15	35.0		Wet sample
Hammer Fall:	N/A	30 in.	4/30/15	26.1		Taped
Rig Type:	Track Diedrich D-50		5/1/15			
Hammer Type:	Safety - Hydraulic					

Depth (ft)	Sample Information										Strata Description	Symbol	Sample Description	Well Log	
	Casing Blows/ft		Penetration (inches)	Recovery (inches)	Depth (ft)	Blows / 6 inch Interval				Coring Time (min./ft)					Moisture Content (%)
	Number	Type				0 - 6	6 - 12	12 - 18	18 - 24						
	8	SS	24	18	30.0	13	34	30	36			Glacial Till (Continued)	Very dense, dark green-brown fine to medium SAND, little Clayey SILT, trace fine to coarse Gravel, moist	[Symbol]	
35	9	SS			35.0	17	36	24	18						Very dense, dark green-brown fine to medium SAND, little Clayey SILT, trace fine to coarse Gravel, wet
37.0											Bottom of Exploration at 37.0 ft				
40															
45															
50															
55															
60															

Remarks

Notes: 1) Stratification lines represent approximate boundary between material types, transitions may be gradual.  
 2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made. AC = After coring; NR = Not Recorded.  
 3) Abbreviations: A = Auger; C = Core; MC=Macrocore; D = Driven; G = Grab; PS = Piston Sample; SS = Split Spoon; SSL = 3.5 Inch ID Split Spoon; ST = Shelby Tube; V = Vane; WOR/H = Weight of Rod/Hammer  
 4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%

Boring No.: **DM-4**

# **Appendix 3**

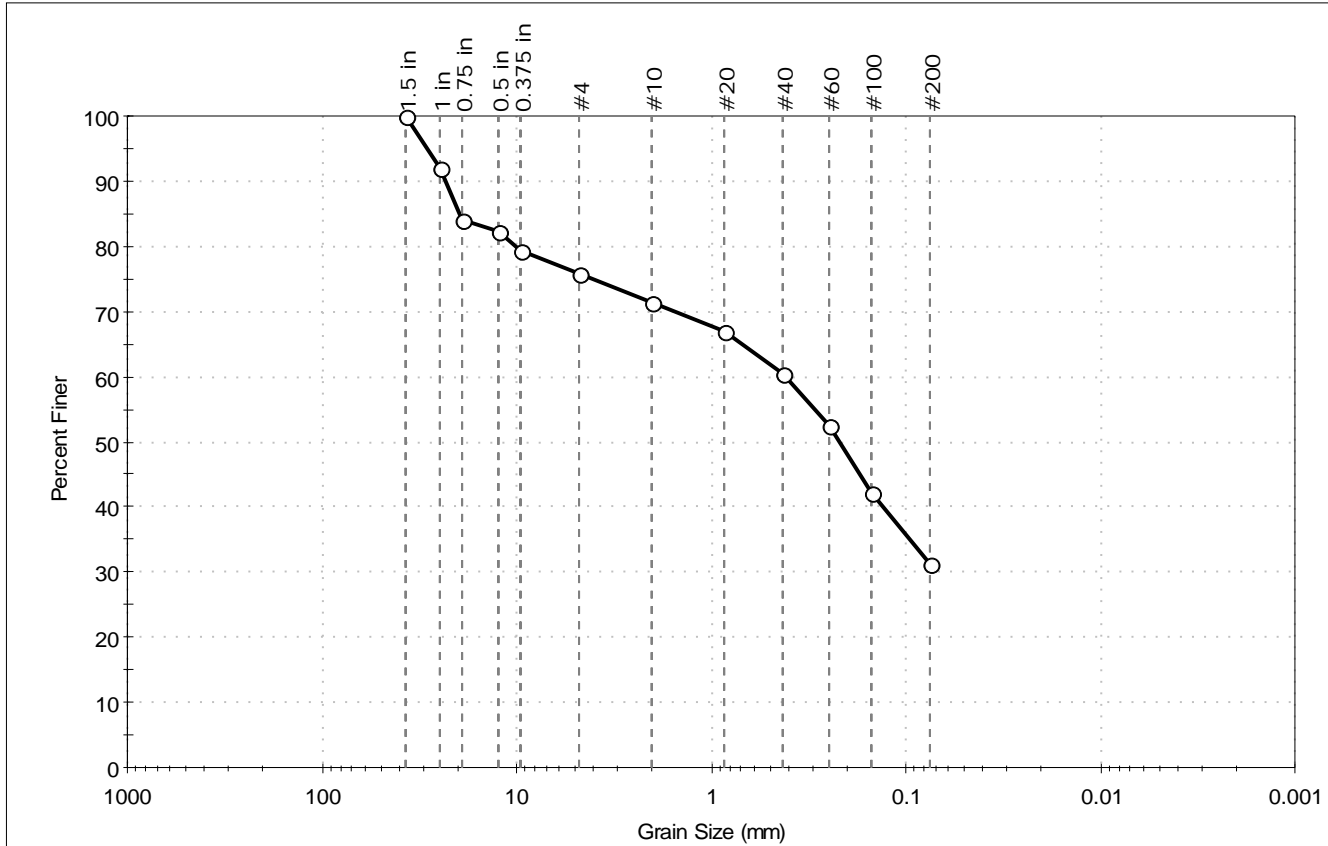
## **Laboratory Test Results**

- GeoTesting Express Laboratory Testing Results



Client: GeoDesign, Inc.	Project: CPV Towantic Energy Center	Location: Oxford, CT	Project No: GTX-303387
Boring ID: DM2	Sample Type: jar	Tested By: jbr	Checked By: njh
Sample ID: S-8	Test Date: 07/02/15	Test Id: 337635	
Depth: 35-37			
Test Comment: ---	Sample Description: Moist, olive brown silty sand with gravel		
Sample Comment: ---			

## Particle Size Analysis - ASTM D422



% Cobble	% Gravel	% Sand	% Silt & Clay Size
---	24.3	44.5	31.2

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1.5 in	37.50	100		
1 in	25.00	92		
0.75 in	19.00	84		
0.5 in	12.50	82		
0.375 in	9.50	79		
#4	4.75	76		
#10	2.00	71		
#20	0.85	67		
#40	0.42	61		
#60	0.25	53		
#100	0.15	42		
#200	0.075	31		

<u>Coefficients</u>	
D <sub>85</sub> = 19.5808 mm	D <sub>30</sub> = N/A
D <sub>60</sub> = 0.4108 mm	D <sub>15</sub> = N/A
D <sub>50</sub> = 0.2200 mm	D <sub>10</sub> = N/A
C <sub>u</sub> = N/A	C <sub>c</sub> = N/A

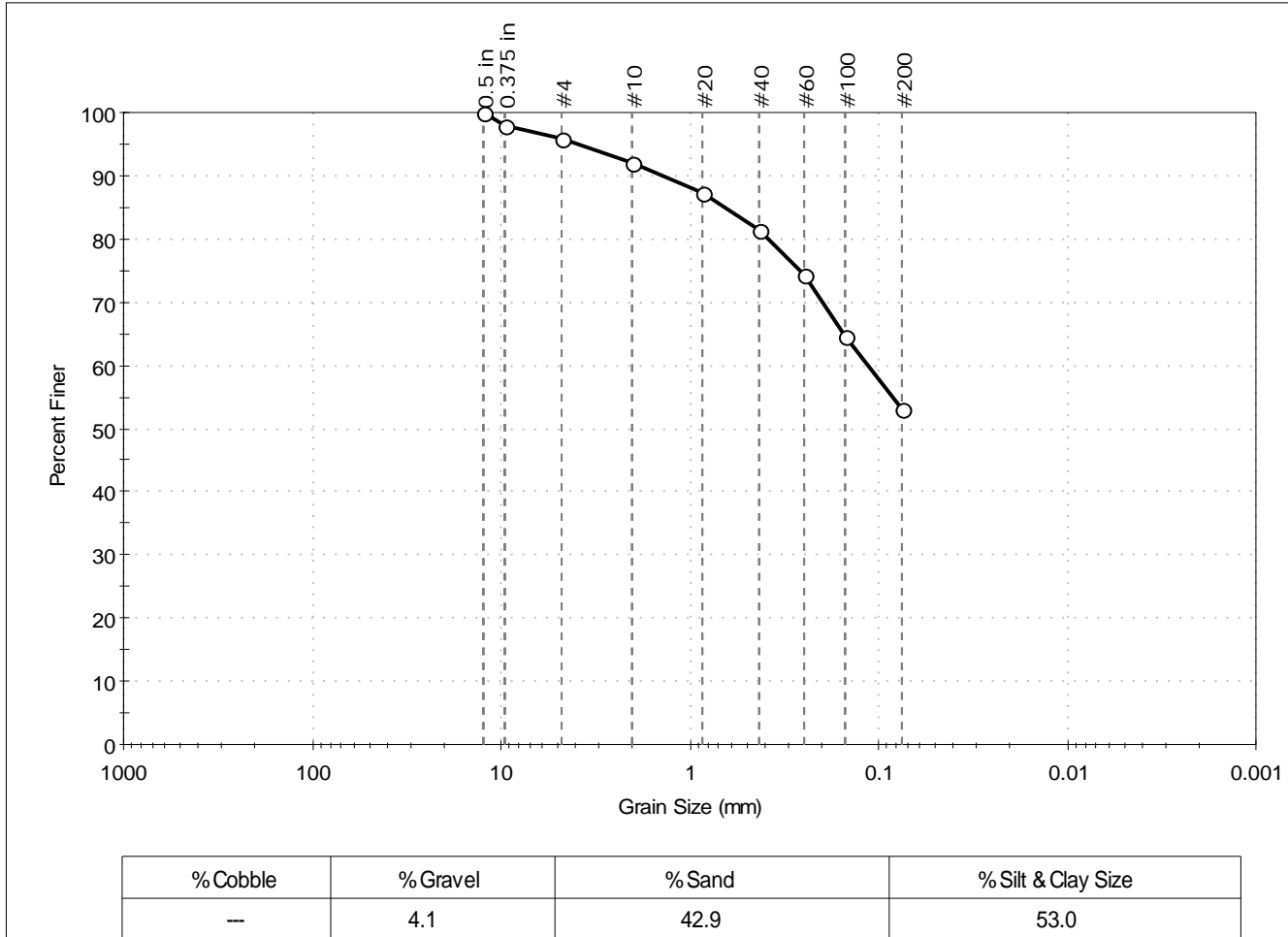
<u>Classification</u>	
<u>ASTM</u>	N/A
<u>AASHTO</u>	Silty Gravel and Sand (A-2-4 (0))

<u>Sample/Test Description</u>	
Sand/Gravel Particle Shape : <b>ROUNDED</b>	
Sand/Gravel Hardness : <b>HARD</b>	



Client: GeoDesign, Inc.	Project: CPV Towantic Energy Center	Location: Oxford, CT	Project No: GTX-303387
Boring ID: DM3	Sample Type: jar	Tested By: jbr	Checked By: njh
Sample ID: S-8	Test Date: 07/02/15	Test Id: 337636	
Depth: 30-32			
Test Comment: ---			
Sample Description: Moist, olive sandy clay			
Sample Comment: ---			

## Particle Size Analysis - ASTM D422



Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.5 in	12.50	100		
0.375 in	9.50	98		
#4	4.75	96		
#10	2.00	92		
#20	0.85	87		
#40	0.42	81		
#60	0.25	74		
#100	0.15	64		
#200	0.075	53		

<u>Coefficients</u>	
D <sub>85</sub> = 0.6451 mm	D <sub>30</sub> = N/A
D <sub>60</sub> = 0.1145 mm	D <sub>15</sub> = N/A
D <sub>50</sub> = N/A	D <sub>10</sub> = N/A
C <sub>u</sub> = N/A	C <sub>c</sub> = N/A

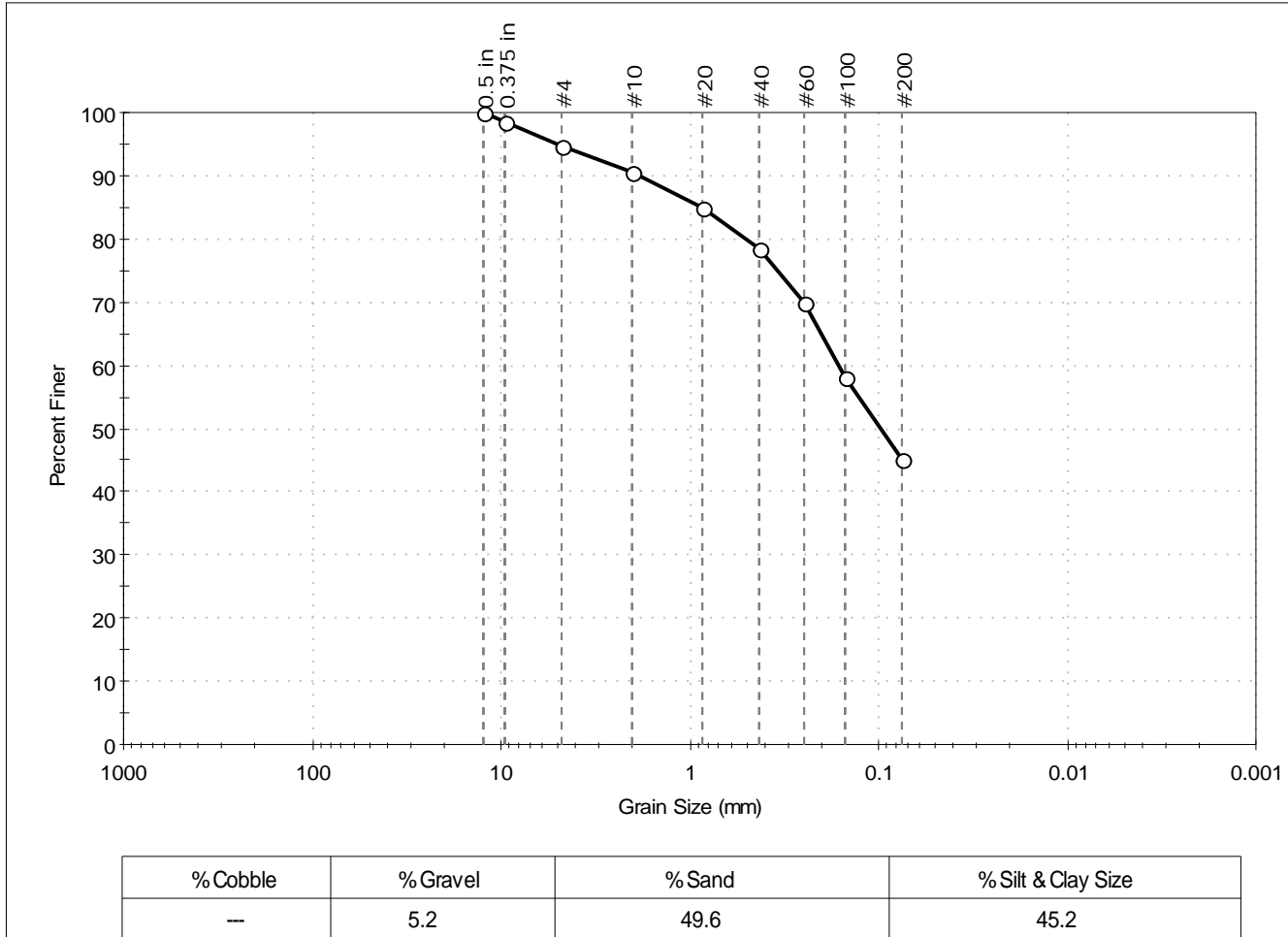
<u>Classification</u>	
<u>ASTM</u>	N/A
<u>AASHTO</u>	Silty Soils (A-4 (0))

<u>Sample/Test Description</u>
Sand/Gravel Particle Shape : <b>ROUNDED</b>
Sand/Gravel Hardness : <b>HARD</b>



Client: GeoDesign, Inc.	Project: CPV Towantic Energy Center	Location: Oxford, CT	Project No: GTX-303387
Boring ID: DM4	Sample Type: jar	Tested By: jbr	Checked By: njh
Sample ID: S-7	Test Date: 07/02/15	Test Id: 337637	
Depth: 25-27			
Test Comment: ---	Sample Description: Moist, olive yellow silty sand		
Sample Comment: ---			

## Particle Size Analysis - ASTM D422



Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
0.5 in	12.50	100		
0.375 in	9.50	98		
#4	4.75	95		
#10	2.00	90		
#20	0.85	85		
#40	0.42	78		
#60	0.25	70		
#100	0.15	58		
#200	0.075	45		

<u>Coefficients</u>	
D <sub>85</sub> = 0.8414 mm	D <sub>30</sub> = N/A
D <sub>60</sub> = 0.1637 mm	D <sub>15</sub> = N/A
D <sub>50</sub> = 0.0973 mm	D <sub>10</sub> = N/A
C <sub>u</sub> = N/A	C <sub>c</sub> = N/A

<u>Classification</u>	
<u>ASTM</u>	N/A
<u>AASHTO</u>	Silty Soils (A-4 (0))

<u>Sample/Test Description</u>
Sand/Gravel Particle Shape : ROUNDED
Sand/Gravel Hardness : HARD



# **Appendix 4**

## **Limitations**

## **LIMITATIONS**

1. Actual subsurface conditions will vary. The nature and extent of variations between these explorations and observations may not become evident until construction efforts are undertaken.
2. The slug tests were performed at two boring locations and values of hydraulic conductivity were estimated based on interpretations of the test results using the U.S. Department of the Navy, Naval Facilities Engineering Command (1982) method. Perspective designers and contractors should review the available boring logs, slug test data, and laboratory test data and make their own interpretations of the hydraulic conductivity of the site soils.
3. Water level readings were made in drilled holes and observation wells at the times and under the conditions stated on the logs. Fluctuations in the level of the groundwater may occur due to variations in construction activities, rainfall, temperature, and other factors occurring since the time measurements were made.
4. Figures included within this report are for design evaluation purposes only, and are not to be used for soliciting bids or for construction.
5. This report has been prepared in accordance with generally accepted soil and foundation engineering practices.